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NOV.-DEC. 1979

na Business Review

1980

Business Outlook

Division of Research
School of Business / Indiana University

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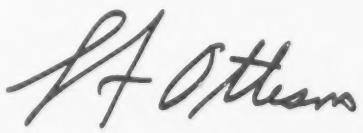
HIGHLIGHTS OF THE OUTLOOK—A MESSAGE FROM THE DEAN

One year ago the Indiana University School of Business Outlook was among very few in the nation forecasting no recession for 1979. We are pleased that our minority view was a reality this year. Inflation and its associated consequences of declining investment and productivity continue. New efforts by the Federal Reserve Board to restrain the inflationary forces in the nation hold hope for 1980, but their price will be a general downturn in economic activity in the early part of the year.

Specific forecasts for automobiles, housing, government spending, and business investment as well as for inflation and interest rates appear in the following pages. This national business outlook has major bearing on the economy of Indiana. Again this year we are pleased to present the views of writers from ten areas in the state. The report from North Central Indiana is more detailed than those previously offered.

The Outlook offered in the following pages suggests a recession for early 1980 with consumer prices continuing to rise in the double-digit range. Unemployment in the early part of the year will rise, but the recession of 1980 will not be as severe as the downturn of 1973-1975. As the year progresses we may expect a decline in interest rates and a general recovery of business activity. The latter will be aided by a reduction in business taxation that will help stimulate investment. In the election year of 1980, consumers may also anticipate a tax break.

This Outlook for the year ahead is realistic without being pessimistic. Fundamental changes in the economy make a sharp downturn unlikely, and a return to moderate growth is anticipated before the year ends. Private efforts, judicious government policy, and international goodwill can make 1980 a better year.



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1980 BUSINESS OUTLOOK

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This outlook was prepared in the first week of November 1979.

INDIANA BUSINESS REVIEW **VOLUME 54** **NOVEMBER-DECEMBER 1979**
(U.S.P.S. PUB. NO. 261780)

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Indiana Business Review is published six times yearly by the Division of Research, School of Business, Indiana University, Bloomington and Indianapolis: H. D. David, Administrative Director.

Second class postage paid at Bloomington, IN 47405. Subscriptions are available to Indiana residents without charge. Address manuscripts (two double-spaced copies) to Morton J. Marcus, Division of Research, School of Business, 625 N. Jordan, Bloomington, IN 47405. *Indiana Business Review* is not responsible for opinions expressed by contributors.

The National Economy

INTRODUCTION

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A year ago we went against the vast majority of opinion and argued that there would not be a recession in 1979. Our five major reasons for the no-recession scenario are summarized as follows:

1. The economy had too much steam in 1978 to experience a continuous decline in real output in 1979.

2. The housing market was not nearly as sick as most people thought it would be. (Our forecast of 1.75 to 1.8 million housing starts for 1979 was nearly on target.)

3. We argued that the widespread publicity given the upcoming 1979 recession would set in motion protective measures to offset it as both households and firms braced for recession. (The UAW-GM contract without a strike is just one of the events that fall in this category.)

4. There appeared to be ample liquidity in the economy throughout 1979, and we felt that real interest rates were far too low (they turned out to be negative for a good bit of this year) to curtail spending, and that the kind of liquidity crunch that took place in 1974 would not be in evidence in 1979. (However, we didn't anticipate the October 6 monetary action.)

5. We felt that our foreign trade position would improve substantially over 1978's $10.3 billion deficit for net exports. Even the $4 billion deficit for the first half of 1979 improved Gross National Product by $6.3 billion.

There is no possibility of a recession in 1979 given the conventional definition, since real Gross National Product rose at a 2.4% seasonally adjusted annual rate in the third quarter of 1979 (according to preliminary data.) The real growth figures for the 1979 economy, for the first three quarters of the year, are:

1979:1	+1.1%
1979:2	−2.3%
1979:3	+2.4%

The National Bureau of Economic Research is unlikely to call 1979 a recession year since the unemployment rate has been below 6%, and there was positive real growth in the first and third quarters of the year.

"The most widely heralded recession of recent times," as some analysts called it, didn't come off as scheduled in 1979; *it has been postponed to 1980.* If the Fed had continued to bite the marshmallow, as it had done through September of 1979, we would forecast no recession in 1980. The October 1979 tightening of monetary policy, however, is almost certain to cause the economy to go into a slump in 1980.

The U.S. personal savings rate was only 5% during the first half of 1979, far less than the West German rate of 14%, the French rate of 17%, and the even higher rate of the Japanese. Such savings are a major reason why these economies have experienced greater growth and productivity than our own. Since aggregate saving consists of the combined sav-

ings of households, businesses, and the government, steps must be taken to increase savings in all of these categories.

There are encouraging signs that such measures will be taken. A unanimous report issued by the Joint Economic Committee stresses the need to approach our economic problems on the supply side rather than by traditional Keynesian demand management. (This report is the first the Committee has made in 20 years in which the Democrats and Republicans didn't issue separate opinions). We may see more supply-side economics actually in practice next year, and that will initiate the framework for higher long-term real growth rates. However, the stage is set for 1980 to be a slow year, with negative growth over the first half.

The key to the short-run future of the economy depends upon the recent past and the present posture of the Federal Reserve Board. The Fed allowed the money supply to expand far more than it should have over most of 1979. The target rates of growth for M_1 and M_2 were exceeded by a substantial margin. The Fed's reluctance to admit that the effective supply of money was growing even faster than that added to the excess liquidity in the economy and kept the real rate of interest negative until early October.

There have been very important changes in the financial structure in the last couple of years, and the effective money supply has been bolstered by the addition of money market funds, repurchase agreements between commercial banks and nonbank borrowers, domestic borrowing of Eurodollars, increases in NOW (negotiated orders of withdrawal) accounts, and more widespread use of credit union share draft accounts. All of these have made money easily available.

Borrowing of all kinds continued through third quarter 1979. Then, suddenly, on October 6, 1979, the Federal Reserve shifted its posture from one of extreme ease to one of relative stringency. (We say relative because the moves taken on that date were construed by many financial experts, particularly non-U.S. bankers, to be far less stringent than the circumstances warranted.) The Fed's "Saturday night special" moves included a new record full-percentage-point boost in the discount rate (from 11% to 12%), and a new 8% reserve requirement against large CD's. The latter had a more profound impact on the financial markets than the discount rate jump, and the prime rate was pushed up rapidly to 15¼% (as of November 2), a U.S. record. More significant was the fact that the Fed stated publicly that it would place more stress on curbing the quantity of bank reserves than it had done in the past, and would place less weight on the federal funds rate, which is the cost of the excess reserves that commercial banks lend one another. If this shift from a "Keynesian" to a "Monetarist" view of monetary policy lasts, it is likely to be one of the most important policy shifts that the Fed has made in the last decade. The discount rate is still quite low. By the end of November it may be raised another full point to 13%. On November 3, the federal funds rate had hit 15½%. If commercial banks are charging that rate to borrow from one another, the 12% rate they can borrow from the Fed is downright cheap.

The Federal Reserve acted on October 6 partially because of the surge of gold prices, but largely because of an error in calculating the money supply. Four and a half billion dollars was erroneously counted as part of the money supply; Manufacturers Hanover Bank had included deposits due other banks, which aren't part of the money supply, as demand deposits, which are part of the money supply, in its calculations. The Fed thought the money supply was growing too rapidly (when it really wasn't) and stepped harder than necessary on the monetary brakes.

The implications of this shift in Fed policy are clear. The new policy will certainly put a serious crimp in bank lending and that will have an immediate impact on small business borrowing, consumer installment credit, and other

short-term loans. Less immediate, but probably more important to the outlook for 1980, is the impact of monetary policy upon both short-term and long-term interest rates. Financial disintermediation, the horror word of 1966-67, 1969-70, and 1973-74, is with us again, and the residential housing market is beginning to decline sharply.

If the Fed sticks to its guns, interest rates will continue to rise to the 15% to 16% level, there will be a rather sharp decline in economic activity (not unlike 1974), and both short-term and long-term rates will start down in mid-1980. At least twice in the last decade, however, the Fed has decided to concentrate on controlling the magnitude of bank reserves. In 1972 it announced that it was going to focus its policy primarily on bank reserves to control the rate of growth of the money supply. It was simultaneously trying to achieve two targets—money supply growth and a target rate for federal funds. Since the Fed has a pretty good control over the latter in the short run, it gave up on the money-supply-growth target. Again in early 1975 the Federal Reserve decided to state publicly its money supply growth targets and try to achieve them, but again the federal funds target won out. Mr. Volcker has given many money watchers the impression that things will be different this time. If the Fed continues to treat the magnitude of bank reserves as the primary target, and to treat the federal funds rate as just another price to be set in the financial marketplace, then interest rates could continue to move up another couple of absolute percentage points in early 1980.

The higher interest rates move in the fourth quarter of 1979 and the first quarter of 1980, the lower they will be in the last half of 1980 and in 1981. If the Fed does cut the federal funds rate loose to find its own market level, short-term interest rates will move up into the 16% range, with long-term rates approaching short-term rates. Tighter money will make any upcoming recession longer and deeper than it would be otherwise.

Now we come to the critical question for the outlook. We cannot forget that 1980 is an election year, and that Congress and the Administration (who have been generally supportive of the Fed changes) may not tolerate a decline in economic activity that substantially decreases their chances of being elected. If the Fed continues to keep the monetary screws on the economy, and if interest rates move toward the 16% level, we think it is quite likely that there will be moves toward non-price rationing. We may see a shift to selective credit controls if interest rates top 16%. Higher down payments for residential housing are already in process, so credit controls, if enacted, will come in the area of consumer installment credit, which has traditionally been insensitive to interest rates. The Fed is going to come under increasing pressure from Congress if it continues its policy of monetary stringency, and Chairman Reuss of the House Banking Committee has been quite vociferous in his opposition to increases in the nominal rate of interest. The Fed can continue to tighten, but will it? That is the $64 question for the 1980 outlook.

We see two possibilities for early 1980. Either the Fed will let money rates of interest rise to achieve a *real* cost of borrowing of 3-4% (which in a world of 13% inflation means 16-17%), or selective credit controls will be enacted. In either case there is bound to be some contraction in the level of real economic activity through the middle of 1980.

CONSUMER PRICE INDEX

EUGENE A. BRADY

A year ago we expected the rate of inflation to exceed 8%. In our mid-year update of the 1979 outlook we revised that estimate upward to 10%. With the Consumer Price Index reflecting a 13% increase (at a seasonally adjusted annual rate) through the first three quarters of 1979, it appears that our estimates of inflation were

underestimated substantially. However, our forecast was for inflation as measured by the *implicit GNP deflator* rather than the CPI, and through the first three quarters of 1979 the implicit deflator has been rising at about the rate we projected for it at mid-year. We consider the implicit deflator a more accurate guide to the rate of inflation than the CPI, although the latter index is more widely known.

The CPI has two serious problems that make it overstate the rate of inflation. First, it has an upward bias to it since it is a base weighted index, measuring the changes in prices of items that the average consumer purchased in 1972-73. The basket of goods purchased in that period is quite different from the basket of goods and services people are buying today. The CPI overestimates inflation because households tend to substitute less expensive products for those that have gone up more rapidly in price. This process of substitution changes the actual current weights in the index. For example, if the price of coffee doubles while the price of tea remains constant, households will tend to substitute tea for coffee. The fixed-weight CPI index assumes that the relative weights of tea and coffee are unchanged, or that tea and coffee are consumed in the same proportions that they were before coffee prices rose. These unchanged base weights place higher weights on the prices of those products that have had large price increases than would a price index which kept the weights current. Consider two basic components of the CPI. Housing services had a weight of 29.8% in 1972-73; that weight is 17.3% today. Gasoline had a 4.2% weight in the 1972-73 base period; that weight is currently 2.9%. Both of these items have gone up in price much more than the overall rate of inflation, so that the CPI, which uses the old weights, generates a higher rate of price increase as a result of that process.

A second major problem with the CPI is its treatment of housing. The CPI index overemphasizes the costs of new housing and places less weight on other operating costs involving home ownership. Since only a small proportion of households purchase houses in any given year, the index shows an upward bias when new housing and mortgage costs escalate rapidly—as they have done in the last two years. With new house prices up 17% in both 1978 and 1979, the CPI distorts the inflation rate upward.

The CPI is currently rising at a 13% annual rate, but the implicit deflator shows that prices in late 1979 were rising at a 9.3% rate. It may be of some comfort for our readers to know that we are not really living in a world of double-digit inflation after all!

INFLATION, PRODUCTIVITY, AND EMPLOYMENT

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The Consumer Price Index (CPI) has averaged a 12.5% annual rate over the first nine months of 1979, up from an annual rate of 9% in 1978. Food, energy, and home ownership categories led the rapid rate of inflation in 1979. During the first nine months of 1979 the annual rates of inflation have been 10.2% for food, 51.1% (for gasoline only) for energy, and 13.7% for overall housing costs. Any complete discussion of inflation, however, must also account for the role of overall demand. The discussion which follows takes a closer look at both the special factors and the demand factors that will influence the inflation rate in 1980.

The inflation rate of consumer food items has accelerated in each of the last three years. In both 1977 and 1978, the price of food rose much faster in the first half of the year than in the second half. The same should be true in 1979 though this pattern will not be as pronounced as it has been in the previous two years. Although farm prices have been falling

since April, wholesale food prices dropped for only a few months and began accelerating in August and September. Retail food prices rose slowly in July and August, but picked up substantially in September. Thus, the abatement in food prices for 1979 may already be over.

Weather has played an important role in determining seasonal changes in food prices, but other forces have been slowly pushing rates upward. Government regulations for agriculture, the increasing role and costs of nonfood factors in the food production process, the beef cycle, and the effect of an increased minimum wage have all worked to increase the price of food consumed at home and in restaurants. We expect these trends to continue into 1980 with food prices staying within the 8-10% range.

During the first nine months of 1979 the price of fuel oil and coal rose at an annual rate of almost 56%. In September, the average retail price of a gallon of fuel oil across the United States was 85 cents and that of a gallon of gasoline was 99.8 cents. The *fundamentals* of the energy situation should get no worse than they are now, but there is so much uncertainty about the *politics* of oil that any prediction should be accepted with caution. As our economy slows down and as we implement various long-range energy programs, the demand for foreign-produced energy supplies will slowly taper off. However, given the political uncertainties guiding the short-term availability and price of oil, we believe a safe course to predict is a future similar to the recent past; that means increases of between 30% and 40% in the price of crude oil over the next year.

Increases in mortgage interest rates, insurance, and property taxes were largely responsible for the overall price index of home ownership accelerating in the first nine months of 1979. This increase from the 1978 rate of about 11% was also fueled by increases in the price of houses. With interest rates peaking and with more state and local governments rolling back property taxes, some relief in the price of home ownership during the rest of 1979 and into 1980 is likely. As new house prices continue to rise, however, there may be little progress in the overall price of home ownership in 1980.

The rise in the price of individual commodities can create significant and sustained inflation only if the dollar value of demand is allowed to increase. Aside from the special factors, if the dollar demand for goods and services rises faster than firms can supply them, overall price inflation results. When demand increases rapidly, manufacturers, for example, are encouraged to add an extra shift, give employees more overtime, or perhaps compete more vigorously for labor and other inputs. Manufacturers might even exploit the situation initially as apparent temporary back orders for products prompt some firms to raise prices without attempting to increase production. In the end, if demand increases faster than output, both output and prices move higher. That seems to be what occurred between 1975 and 1978 as the economy recovered from the 1974-75 recession. From about the middle of 1975 the rate of growth of dollar demand outstripped the normal rate of growth of real output. Until the latter part of 1976 increasing productivity allowed the inflation rate to fall. But as full capacity, was approached productivity began to fall and inflation began to accelerate.

By 1978, it was apparent that this economic growth could no longer continue at a rate that was higher than its long-term average. Real GNP still managed to grow at more than a 4% rate in that year, but labor productivity, as measured by output per manhour in the private business sector, was virtually unchanged. This has importance for inflation because the prices of inputs were accelerating while the productivity of labor was declining. For example, hourly compensation in the private business sector rose at a 9.8% rate in 1978 compared to only 8.5% in 1977. Combined productivity and compensation numbers show that labor costs per unit of

output rose at a 9.4% rate in 1978 compared to only 5.8% in 1977. These cost-per-unit increases tend to set a floor for increases in the price of products of the private business sector.

Productivity figures for 1979 are distorted by bad weather and strikes, so the picture looks worse than it really is. However, in the first three quarters of the year, output per manhour in the private business sector fell by more than 1.7% while compensation continued to accelerate; therefore, unit costs in the private sector rose at an 11½% annual rate during the first nine months of 1979. Few people expect this pace to continue much longer, but there is ample reason for compensation costs and, thereby, for unit costs to continue rising at or above the 1978 level. Many groups, in and out of the private business sector, who were surprised by the acceleration of inflation in 1979 and who agreed to compensation increases based on what are now conservative anticipations of inflation, will look to 1980 and beyond as a time to catch up. Even if the recession reduces employment significantly, this catch-up component of wages will keep unit costs from falling very far. In fact, if the recession is milder than we predict, unit labor costs could remain in the double digit range this year and in 1980.

For the near future, the effects of demand on inflation clearly will depend on factors other than the efforts of workers attempting to catch up with inflation. The big uncertainty right now is what policymakers will do as the recession takes hold. In November, inflation is still public enemy number one, but this sentiment could easily change. If the Federal Government tries a quick fix (tax cut) for the economy as soon as a recession begins to tug on the unemployment rate, we can count on there being less slack, and perhaps more importantly, less downward revision in inflationary expectations. A quick demand fix for recession could leave inflation in the double-digit range for some time to come.

How the inflation rate performs in the future depends upon monetary as well as fiscal policies. Most empirical work suggests a lag of about a year, give or take six months, in the effect of monetary changes on the inflation rate. If this relationship holds for 1979 and beyond, there is ample reason to project less pressure on prices from the monetary sphere. In the six-month period starting from about October 1978 to March 1979, the money growth rate was brought to a virtual standstill. This brought the twelve-month moving average of money growth down into the 4% range, a substantial reduction compared to the 9% rate in the first nine months of 1978. If the Federal Reserve System can keep within its targets for the rest of the year, this monetary reduction should begin to slow demand and have a measurable effect upon the inflation rate toward the end of 1979 and well into 1980. However, if the Fed lets the money supply fuel demand at or above the 1978 rate of money growth, then the benefits gained from October to March will be quickly dissipated.

One caveat is necessary concerning the current growth of the money supply. The general rise in interest rates coupled with the introduction of new financial instruments makes any interpretation of monetary data very difficult. Accounts which transfer funds between checking and time deposits make it virtually impossible to estimate what has been referred to as money, or M_1. The availability of such highly liquid (and in some cases checkable) assets as money market funds makes the line between money and other assets difficult to locate. These impediments to measuring individual monetary aggregates make it difficult to know exactly how fast the money supply has been growing and what the ultimate effects of this growth will be. However, since *most* of the monetary aggregates have been growing more slowly this year, there is some evidence for improvement in the inflation forecast coming from the monetary sector.

If we try to put all the pieces together, we see reasons for inflation, measured in terms of the CPI, averaging about 12% next year. That

figure represents some acceleration over the 1978 inflation rate, but an improvement over the rate during the first half of 1979. The latter acceleration was largely the result of increases in the prices of food, energy, and home ownership. Marginal improvements in food costs and in home ownership costs should reduce somewhat the effects of these special factors in the next two years. Much, of course, depends upon OPEC pricing decisions as well as the strength of the U.S. economy. We pointed out that the rate of growth of dollar demand for goods and services affects the degree of inflation any special factor can stimulate. Since we see flat or slowly rising dollar demand over the next year, the effects of the special factors on the inflation rate will be contained. However, in the event that monetary or fiscal authorities stimulate demand too rapidly, in what appears to be a stagnating election year economy, any hopes of containing the inflation rate to even a 12% range will be lost.

Employment levels and the unemployment rate are also affected by special factors and the growth of spending. Since 1975, when the unemployment rate peaked at 9.2%, employment has steadily grown. However, as we approached the full employment condition (in June the unemployment rate equalled 5.6%), increases in real demand and employment began to taper. The growth rate of employment peaked at 4.7% in 1977, fell to 3.6% in 1978, and has dropped to an annual rate of about 1.6% in the first nine months of 1979. Between March and September 1979 the economy failed to create any new jobs, a striking contrast to the 1978 U.S. economy which was able to put an additional 3.6 million people to work.

Although employment gains have been diminishing in 1979, we have not yet seen a significant rise in the unemployment rate. However, as real output begins to fall in the first half of 1980 we also expect to see the level of employment falling. This will lead to a rise in the measured employment rate. Unemployment usually lags output changes. Since we expect output to bottom out by June, 1980, we predict that unemployment will be rising well beyond June and will not peak until autumn. If OPEC continues to increase crude oil prices in 1980 then the unemployment rate could still be rising as late as December 1980. We predict that the unemployment rate will peak somewhere between 7.5% and 8.5%.

These unemployment rate predictions do have some basis in prior experience. In 1975:2, when the recent expansion began, real GNP growth was positive for the first time in five quarters. Employment growth jumped to a fast annual rate of about 3%. However, the unemployment rate continued to rise because the recovery was also bringing a rise in labor participation. During that quarter alone, the labor force grew by an annual rate of nearly 7.5%.

GOVERNMENT

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Federal Government

In real terms, Federal-Government purchases of goods and services declined almost $2 billion in 1978 from 1977. In an election year amid growing concern over the status of U.S. defense capabilities—especially in the context of the SALT debate—and the widely held perception of an incipient recession, it is likely that such expenditures in real terms will rise during 1980. In nominal terms, government GNP purchases will rise even faster, not only because of inflation but because of pay increases for the armed services, necessary in the effort to rescue the volunteer armed services policy. Part of such a rescue will depend upon the severity of the rise in unemployment—the bigger the latter, the less the need to raise pay since enlistments correlate closely with the unemployment rate.

Whatever else occurs, it is likely that government GNP purchases will rise somewhat (probably 2-3%) in real terms and sharply (probably over 10%) in nominal terms.

Depending on the depths of the contraction during the fourth quarter of 1979 and the first and possibly the second quarter of 1980, tax rates will be reduced. During an election year, tax rates may be reduced in any event but with an oncoming contraction and the continuing general revolt against "high" taxes, the probability of a tax cut approaches 1.0. Furthermore, the growing recognition that inflation persists even when there is a deficiency of total spending relative to the capacity of the economy to produce, as evidenced by high inflation rates with high and increasing levels of unemployment (a real macroeconomic paradox), reduces the restraint that might otherwise be felt to "hold the line" and reduce the Federal Government's deficit at all costs.

Again, with unemployment rising in late 1979 and early 1980, transfer payments will necessarily increase. It is difficult to believe, therefore, that the overall Federal Government deficit can be held to anything like the $29-32 billion deficit currently being targeted by the House and Senate for fiscal 1980. On a calendar and national income accounts basis the Federal "stimulus" to the economy has decreased sharply each quarter, from a $54 billion deficit in 1977:4 to an estimated $7 billion deficit in 1979:2. A reversal is to be expected, however, during 1980.

The impact of such a deficit reversal for the overall level of economic activity during 1980 will depend upon the timing of the tax reduction, which taxes are cut, and to what extent. The most sensible tax cut would involve social security taxes. Such a reduction would simultaneously lower business costs and raise disposable income and profit margins. It would thus provide a spending stimulus and a restraint on inflation. Concerns over the financial viability of the Social Security Trust Fund will, of course, be voiced. These concerns may get short shrift, given the likelihood not only of better economic performance in the 1980s but also, and mainly, of funding assurance from general revenues in the event of any shortfall.

In addition to these tax reductions, an increase in the investment tax credit is to be expected for well-known reasons associated with the productivity slowdown and because such a credit appeared to work well in the early 1960s. In addition, personal income taxes will doubtless be reduced on the grounds that if a break is given to business, households must also share.

On the whole, a tax rate reduction in 1980 is likely. But its timing and amount are subject to more than the usual uncertainty.

State and Local Government

In the past, expenditures on final product of state and local governments were the easiest to predict by simple linear extrapolation. However, like so many other aspects of economic relationships in the 1970s, this is no longer the case. "Proposition 13" mania requires something more than a slide rule. In many respects, this component of aggregate demand is more important than Federal Government expenditures. It exceeded the latter by almost 70-90% in recent years in both real and nominal terms. While Federal Government purchases of goods and services in real terms has steadily declined from 12% of GNP in 1968 to 7% in 1978, state and local government expenditures have remained steady at between 12% and 13%. The tax revolt suggests that this ratio may well shrink in the future. However, for 1980, since we project modest or zero real growth, it is unlikely that aggregate state and local expenditures will decline and hence their share of GNP will remain at about 12%. In future years, as real aggregate growth accelerates, the relative importance of state and local spending should decline.

The overall impact of the public sector is thus expected to be mildly stimulating during

1980 due almost entirely to an increase in real defense spending–especially later in the year–and to a tax rate reduction. The timing and lagged incidence of the tax rate reduction will depend crucially on the severity of the anticipated contraction in real output and unemployment.

PERSONAL CONSUMPTION EXPENDITURES

EUGENE A. BRADY

The third quarter 1979 figures for consumption spending were much higher than expected. Consumption spending spurted at a $53 billion annual rate, more than double the $22 billion increase registered in the second quarter. Durable goods spending rose $5 billion in the third quarter, reversing the second quarter's $5.1 billion decline. Nondurable purchases rose $21 billion in the third quarter, up sharply from the second quarter's $10 billion increase. This increase in spending, which came in the face of only $35 billion in disposable income in the third quarter, indicates that households decreased savings and spent more than they earned. As a result, the savings rate declined from 5.4% of disposable income in 1979:2 to only 4.1% in 1973:3. The current savings rate is the lowest on record in the U.S. since 1951!

Although part of the surge in consumer spending was financed by a lower savings rate, a good bit of it was financed by mortgage debt. The strong surge of consumption spending in the third quarter was partially due to refinancing homes whose prices had escalated over the past several years. The August issue of *Morgan Guaranty Survey* points out that the increased credit made available by home refinancing (about $50 billion in the last year) exceeded the credit financed through new consumer installment credit! If the Fed is successful in bringing down the rate of inflation, then the amount of funds that can be raised through refinancing existing housing will tend to fall off, and there will be a slowdown in the amount of prospective consumer credit that can be generated in this manner.

A sharp curtailment of credit, however, will cause housing starts to decline (as we expect), and this will tend to drive up prices of the existing housing stock. Strong excess demand for housing may cause house prices to rise; however, for this to feed back so as to make more credit available, funds for home refinancing would have to be available. We expect there to be a substantial amount of credit rationing in the housing market, and we believe that consumer installment credit will be much tighter next year.

The tightened mortgage market, together with more stringent policies for consumer installment credit, will put a crimp in consumption spending in 1980, particularly during the first half of the year. This is one of the reasons we expect real output to decline next year.

If the rate of inflation doesn't respond to current monetary policy, selective credit controls may be in place by November 1980. We expect that in 1980 controls over down payments on consumer installment credit are more likely than any return to wage-price controls.

AUTOMOBILES

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Much to the surprise of many observers, the steep decline in automotive output that began last spring has not yet thrown the economy into a recession. On the other hand, sagging automobile and truck production certainly has put a dent in total business activity. In the second quarter automotive output declined by some 12 billion constant dollars, and real GNP dropped by $8.0 billion. Since then, largely

because of aggressive discounting and cash rebates offered during the summer, unit sales have rebounded somewhat and until recently were running at a $10.7 million annual rate. At the same time, the second quarter sag in real GNP reversed itself.

It is tempting to argue that without the slump in automobile and truck sales, GNP would have continued its uptrend in both the spring and summer quarters. That argument, however, misses the root cause of our weakening economy. This year's dramatic rise in oil prices has absorbed considerable consumer spending power. If consumers had not deferred their spending for autos and trucks, they would have had to make cuts elsewhere. The only other option for consumers was to dig further into savings, and the savings rate was already far below its historical norm.

If there had been a prolonged automobile strike, the automotive sector's damage to the economy would have been much worse. Perhaps because they feared a recession, negotiators for General Motors and the United Auto Workers came to terms without a strike and avoided putting additional downward pressure on an already faltering economy.

Cutbacks in automotive production in the spring were counterbalanced by consumers' cutbacks in purchases. As a result, an undesired inventory pileup continued, and dealers found themselves saddled with sizable excess stocks. During the summer the inventory buildup ceased, because production was cut by an additional six billion dollars, and sales leveled out in response to the rebates and discounts. Now there is an inventory runoff, but it will have to continue well into next year, unless sales improve, in order to pare down the excess stocks.

We do not look for sales to continue at the recent 10.7 million rate, which was boosted by rebates and discounts. Unit sales of domestics were 8.5 in September, but declined in October, and are expected to dip further in November. One source sees November sales of domestics at roughly 600,000 units (expressed as a monthly, not annual, rate). If current production schedules, which call for 668,000 units in November, are followed, dealer inventories will increase from 1.75 to 1.80 million cars.

Auto sales will not recover completely until consumers find themselves in a stronger position. As we indicated in our analysis of likely consumer spending, that will not happen for the next few quarters. To date, the introductory sales of 1980 models have been lackluster. Normally, there is a noteworthy boost of sales when new models are introduced, and then sales fall off in the late fall and early winter.

Sales are being held up somewhat by a scrappage rate that is almost 11 million units per year: 9.0 million for cars and a little under 2.0 million for trucks. While only 50% of new truck purchases are for replacement purposes, the corresponding figure for new cars is 80%. The truck industry is a growth industry that depends upon an expanding market. Last year, trucks were selling at an annual rate of 4.0 million units. Because of the spring gasoline shortages, however, production tumbled below 2.5 million. Recent forecasts by Ford and G.M. are for 3.5 million units next year—a figure that is probably too optimistic. Heavier trucks, which are purchased by business rather than consumers, account for only about 10% of unit sales, but represent 33.0% of real dollar sales. Truck utilization, which had been running at 90%, has fallen off, and new orders have declined.

Our spring forecast of constant dollar expenditures by consumers on autos, trucks, and parts was too optimistic. It was made before the gasoline crunch and did not anticipate the stringent monetary policy of Chairman Volker. It now appears that real spending will be about $55.0 billion in the fourth quarter, and $53.5 billion for 1980 as a whole. Real spending will be somewhat lower in the first half but will accelerate thereafter, perhaps reaching an annual rate of $55.5 billion in 1980:4.

BUSINESS FIXED INVESTMENT

RONALD F. ROST

In 1978 business fixed investment grew in real terms by 8.4% and was largely responsible for sustaining the economic expansion into 1979. Then capital spending slowed, declining slightly in the second quarter, at the same time that aggregate real output fell by about 2.3%. Capital spending generally is sensitive to the cyclical behavior of production. Thus, when current capacity utilization rates are declining, or are expected to decline soon, the need to expand capacity diminishes. The anticipated path of the economy over the next few quarters suggests a moderate drop in capital spending during the last quarter of this year and the first half of next year. Aggregate capacity utilization declined by 3.4% in the second quarter, and, in spite of a temporary recovery, operating rates are expected to decline until the middle of 1980.

Those sectors of the economy that are especially sensitive to interest rates–nonresidential fixed investment and housing–have been dealt an additional blow by current record high interest rates. By themselves, the combination of a negative real growth rate and a prime lending rate in excess of 15.0% might suggest a substantial collapse of plant and equipment spending. We do not anticipate such a collapse, however, because we expect new investment incentives in the form of a cut in corporate taxes and additional investment tax credits. These incentives will be helpful in avoiding a prolonged recession, and business and government know that they are necessary if we are to improve productivity in the economy and make headway in the fight against inflation.

Today's policymakers face a dilemma because traditional remedies to fight a recession put additional pressure on prices; therefore, policies that stimulate demand without increasing productivity are inappropriate. The beauty of investment incentives is that they stimulate demand and increase productivity; hence, they are currently an attractive policy option.

If no investment incentives are forthcoming, our forecast of plant and equipment spending probably will be too optimistic. There appears to be broad agreement, however, that the growing scarcity of fossil fuels as a basic source of energy, stiffer foreign competition, and stricter government regulations to protect the environment and the health and safety of workers, have left us with a capital stock greatly in need of restructuring.

Over the next twelve to sixteen months, anticipated investment incentives will change the composition of capital spending. Construction spending will shrink as a proportion of total nonresidential investment, because investments in equipment can respond more quickly to favorable tax policies. Evidence indicates that construction spending will not take a nose dive, however. Although construction awards have declined, there is still a significant backlog of large projects, especially office buildings. There are also backlogs of demand for agricultural machinery, railroad cars and roadbed, and aircraft. As a result of the decontrol of oil prices, there is a continuing brisk demand by the oil industry for equipment used for exploration and drilling.

We expect a small increase in real capital expenditures in manufacturing, and a small decline in nonmanufacturing industries. Nonferrous metals and aerospace companies are likely to be big spenders, with current dollar increases of more than 20%. Gas utilities appear to be the only nonmanufacturing industry that will increase real spending, perhaps by 2% to 4%. Airlines will have the greatest decline in real spending, largely because of a deteriorating profit picture brought about by soaring fuel prices.

Real plant and equipment expenditures for the whole of 1980 will be almost identical to those for 1979. In both years, spending will come in around 147.0 billion constant dollars.

Capital spending will decline in 1979:4 and during the first two quarters of 1980. Then it will begin a mild recovery, possibly reaching an annual rate of 150 billion real dollars by 1980:4.

Our views are generally consistent with the results of the latest McGraw-Hill Publications Company survey of capital spending plans. Those results show that in current dollar terms, U.S. business plans to increase spending by 9.5% in 1980. In real terms that figure suggests almost zero growth, which agrees substantially with our view, formulated independently of McGraw-Hill's numbers. Actually, our forecast is somewhat more optimistic, because it was made after the massive credit tightening steps taken by the Fed. The McGraw-Hill survey was made before October 6.

RESIDENTIAL CONSTRUCTION

EUGENE A. BRADY

The pattern of housing starts in 1980 is critical to the overall outlook. Instead of exhibiting a swing countercyclical to the overall level of economic activity, as housing did in the first four postwar housing cycles, housing will be cyclic next year. We can expect that the pattern of housing decline in 1980 will be of the same general nature as that of 1974-75. Housing again can be expected to lead the coming downturn in overall economic activity.

What factors caused housing starts in 1979 to be much higher than most housing analysts anticipated? Late last year there was a general consensus that the U.S. would have 1.4-1.6 million starts in calendar 1979, with spokesmen of the U.S. League of Savings Associations and of the National Association of Homebuilders on the low side of those estimates.

The pattern of savings flows and mortgage lending last August is typical of what happened to the housing market during 1979. The flow of funds into savings and loan associations slowed, but the mortgage lending activities of these same associations escalated. What factors made this phenomenon possible? Four major institutional changes in the housing market allowed more lending with less savings inflows.

1. Lending activity by thrift institutions was not entirely dependent upon savings deposits. Savings and loan associations, particularly, were initiating new mortgages and selling them in the secondary mortgage markets (especially the FNMA and GNMA markets). Packaged mortgage portfolios were also sold to nonthrift institutions, particularly life insurance companies and pension funds. Despite the high costs of mortgage funds, housing and real estate projects were moving ahead. Residential housing and construction for hotels, office buildings, and shopping centers continued at much higher rates than most housing analysts had forecasted.

2. Housing was in strong demand as an inflation hedge, for reasons that we have already discussed. Home ownership provides the household with leverage, subsidies and other benefits. But the main reason for strong demand is that home ownership has never been so cheap. A 12% mortgage in an economy where house prices are moving up at an average rate of 18% is a real bargain. It is far cheaper than a 4% mortgage in the 1950s when inflation was running at less than 2%. Irving Fisher discussed this phenomenon in 1902, and the prospective house-purchaser has pierced the "veil-of-money." The buyer knows what a good investment housing has been with new home prices rising by 17% in both 1978 and 1979. As long as house prices continue to escalate at a rate faster than the mortgage rate, high interest rates will not deter demand. The prime mortgage rate hit 13% in California in late October 1979 for loans up to $75,000; for more expensive homes a sliding scale of rates goes from 13¼% to 16%! Decreases in the loan-to-value ratio, and the difficulty of obtaining credit, not high interest rates, will curtail housing demand in 1980. We expect that the general pattern of down payments will increase

from 20% to 25-30% or even 40%, as the thrift institutions ration credit. The only way to curtail demand when the real borrowing rate is negative is to hit the prospective customer in his or her "cash-flow," and this is the lending pattern we expect for the coming year.

The demand for housing will be strong throughout the 1980s. The population of 25-34 year old households (which includes the age bracket at which most households make their first home purchase) increased 35% between 1970 and 1978, five times as fast as the overall U.S. population. This trend will continue throughout the '80s, so both household formation and age distribution factors will keep housing demand strong. What will happen to *effective demand* is another question!

3. Housing has been so strong this year because new sources of mortgage funds are being tapped by so-called "conduit" institutions, which purchase pools of conventional mortgages and issue pass-through certificates against them. Many are familiar with Fanny Mae, Ginnie Mae, and Freddie Mac, but what about Maggie Mae (Mortgage Guarantee Insurance Corporations's Mortgage Marketing Corporation), Pennie Mae and Connie Mae? They are all new secondary mortgage market institutions which package up units of mortgages (in $25-$100 million per package) and market them as either private or public placements. This institutional change in the mortgage market really got started in 1977 when the Bank of America boxed up for sale some of its own mortgages. So far we are only talking about $1.5-$2.0 billion, but $1.5 billion represents enough funds to finance 25,000 new $75,000 homes with 20% down.

This trend will continue to increase the scope of the mortgage market next year and in the future. When such firms as Merrill Lynch, Sears Roebuck and Greyhound Corporation are getting into the act, we can expect some $20 billion in new funds to be generated annually in the near future. That is enough to finance a third of a million new $75,000 homes.

4. The Federal Home Loan Bank System has been lending funds to the savings and loan associations under its control. Bank Board figures show that the volume of advances outstanding has more than doubled since 1977:3. At the end of August 1979 total Home Loan Bank Advances totaled $35.9 billion, up sharply from the $27.3 billion outstanding as of August 1978. This $8.6 billion in advances will finance a lot of new and existing housing.

Although housing has done well in 1979, we project a decline in residential housing in 1980 because of capital shortages and rationing (by higher down payments) of mortgage credit. Our quarterly estimates for new housing starts in 1980, at seasonally adjusted annual rates, are:

1980:1	1.5 million
1980:2	1.4 million
1980:3	1.6 million
1980:4	1.7 million

INVENTORIES

RONALD F. ROST

For the past few years, we have pointed out that inventory building has been cautious. During the last recession, which began in 1974, businesses were stuck with huge unwanted stocks. Drastic cuts were made in production, but it still took over a year to run off the excess. Inventory investment was a negative 12.0 billion constant dollars in 1975. This substantial disinvestment was accompanied by a surging unemployment rate, which reached 8.8% by mid-1975. Memories of that experience have faded slowly and business has sought to prevent any substantial increases in inventory-sales ratios. For that reason, the dimensions of this inventory cycle will not begin to approach the 1974-1975 experience.

We do expect final sales to decline in the fourth quarter of 1979 and during the first half of 1980. Because inventory stocks have been

generally lean, however, and because the runoff will be smaller, resulting production cuts and layoffs will also be smaller.

The inventory-sales ratio has risen this year, mainly as a result of the decline in sales of automobiles and trucks and of supplies used to make them. Inventory investment proceeded at an annual rate of 18.1 billion constant dollars in the second quarter, but it has fallen off since then. Largely because of the automobile and truck liquidation that began this summer, inventory buying has declined roughly one third from where it was in the spring.

We reported above that auto industry sales have been disappointing this fall in spite of the introduction of new models. Detroit cut back domestic production again in November, but current sales forecasts imply an increase in dealers' inventories of 250,000 units. If sales remain weak, some additional unwanted inventory will pile up in the auto industry. The excess is not likely to be serious, however, as long as production levels are being held down. November production plans for levels 21% below those of a year ago will be cut further if necessary. For that reason, even though autos had an important effect on inventory movements in the spring and summer, we doubt that weak auto sales will cause a sizable additional jump in the aggregate inventory stock in the fourth quarter.

Other inventory buyers also are exhibiting restraint. Earlier in the year, steel users did some stockpiling, but now shipments have slowed. Despite a decline in new orders, there are still substantial order backlogs for machinery and other capital equipment. The recent increase in soft goods stocks is no problem because much of it has taken place to restore the supplies of food manufacturers and oil refiners. In fact, the oil stocks of producers and refiners are approaching their peak levels of two years ago. Clothing orders have been restrained, and clothing stores report tight stocks.

Last spring we indicated that some inventory building might be motivated by the desire to beat price increases. In the present environment, however, with a likely recession just ahead and with interest rates at record highs, there is little incentive to hold speculative stocks. The carrying costs are prohibitive, and the risk of a decline in demand is too great.

The outlook for 1979:4 and for all of 1980 is for negligible to moderate levels of inventory investment. In 1978 real inventory spending was 14.1 billion dollars. For 1979 it will average about $11.5 billion, although the annual rate in the fourth quarter will be down to something like $4.0 billion. In 1980:1 real inventory spending will be close to zero as businesses strive to get stocks in line with dampened sales. As the economy slowly recovers, inventory spending will pick up moderately in the later quarters, averaging around 4.5 billion real dollars for the entire year.

INTEREST RATES AND CREDIT

LAWRENCE S. DAVIDSON

John Maynard Keynes pointed out long ago that interest rates are a highly psychological phenomena and are subject to wild oscillations which accord with the changing moods and expectations of the public. The experience of the 1970s certainly supports his conclusions. In mid-1973, the federal funds rate (the interest rate banks charge each other for loans) stood at about 5½%. In the next year it rose to almost 12%, and in the following nine months it fell back to about 5.2%. Thus, in a period of less than two years, this interest rate changed by well over 1,000 basis points.

We have witnessed a similar turn of events during the last two years, though we have yet to see rates come down. The following table shows the changes in basis points (100 basis points equals 1%) of selected short- and long-term financial instruments from January 5, 1978 to October 12, 1979:

	basis points
THREE MONTH TREASURY BILLS	582
FEDERAL FUNDS RATE	531
90-DAY CD'S	598
4-6 MONTH COMMERCIAL PAPER	636
AAA CORPORATE BONDS	156
LONG-TERM TREASURY BONDS	179

Before discussing how interest rates will change over the period ahead, we need to look at how we got to where we are now. In the past, interest rates behaved very much like an engine's temperature gauge. When the economy ran at a fast rate and the demand for credit was rising rapidly, interest rates increased, signalling that the supply of credit was insufficient to meet the needs of the economy. If the Federal Reserve responded by increasing the supply of credit, the gauge usually moderated by falling back or rising more slowly. However, in 1978 and 1979 a rise in the supply of money pushed interest rates even higher. The difference in this period has been the accelerating inflation rate and the nexus between increasing economic growth rates, monetary growth rates, and anticipated future inflation. Federal Reserve increases in the money supply have been interpreted as signals that inflation was going to rise even faster in the future. This anticipation makes real interest rates shrivel, saving less attractive, and anticipatory (or advance) buying seem highly rational. Hence, increases in the money supply directly increased the demand for credit.

In 1978 consumers led the borrowing band. They apparently have passed the baton to the business sector for 1979. In 1978, total funds borrowed in credit markets equalled about $395 billion, up from about $340 billion in 1977. While business loans were rising by about 15% in 1978, consumers' installment debt increased by nearly 20%; led by a 24% increase in auto debt. In 1979 the situation reversed. In the first six months, consumers, burdened by inflation-eroded real incomes and high debt-payout ratio, added only about 12% to installment debt. Businesses, however, were increasing their borrowings at a 20.6% rate in order to cover the expenditures of slowly moving inventories and previously planned capital expansion.

By the spring of 1979, most economic forecasters were predicting a recession for the year. It appeared that the combination of slow economic growth, a recently tightened money supply, and reduced inflationary expectations had begun to break the momentum of the rapidly rising interest rates. However, by summer the increases in energy prices and the Fed's loosened grip on the money supply began to drive interest rates slowly upward in anticipation of a new surge in inflation. Then, on October 6, the Fed announced a new program of tighter monetary control which sent tremors through the financial community. Interest rates surged and, by the middle of October, the prime rate had jumped from 13½% to 15¼%.

We believe that interest rates are at or very near their peak now, and that sometime during the first quarter of 1980 interest rates will begin to fall. The expectation of negative real growth rates of output during the first half of 1980 and a belief that the Fed will reach and maintain their goal of a reduced growth rate of the money supply will lead the public to expect the inflation rate to fall. Even if the Federal Government increases its borrowing in 1980, the continued slump in auto and housing sales and some reduction in capital spending, will keep the overall demand for credit from exceeding the 1979 level.

More specifically, our assumptions concerning fiscal policy, energy prices, and the 4-8% growth range for M_1 (currency and demand deposits) imply a significant reduction in short-term interest rates by the middle of 1980. The prime rate should fall back to about 13% by June and to about 10% before December. Even though more time is needed to reduce long-term rates, we anticipate a reduction of 100 basis points by 1980:4.

NET EXPORTS

EUGENE A. BRADY

The net export sector has registered favorable gains throughout 1979, and the nation's trade position should continue to improve in 1980. After a lag of two years, the persistent weakness of the dollar is finally beginning to pay off. One of the major benefits of a lower price for the dollar on world markets is that the price of our exports to other countries falls, and our imports from other countries become more expensive. The decline in the value of the dollar should provide a strong stimulus to the net export sector. In the third quarter of 1979, the U.S. was running a trade deficit of $5.3 billion. Even though it is quite likely that the OPEC cartel will increase petroleum prices next year, we expect that the deficit will be almost eliminated in the fourth quarter of 1979 and that a trade surplus of approximately $5 billion will be generated during 1980.

The surplus will be generated in two major categories of commodities, capital goods and agricultural products. Most people think that our trade surplus would be mainly in the agricultural sector, but the surplus in capital goods was more than two and a half times as great as in agricultural products over the last few years. This tendency for capital goods to play a larger role than agriculture in the net export picture will continue throughout 1980.

U.S. exports have been increasing steadily over the last few years, but the share of world trade accounted for by U.S. exports has been declining steadily over the last decade. In 1967 our exports came to 17% of total world trade. By 1973 they had declined to 14%, falling still further to 12% in 1978. The devaluation of the dollar will finally improve the competitive position of our exports, and this fraction of world trade represented by U.S. exports should stabilize at about 12%.

The Indiana Economy

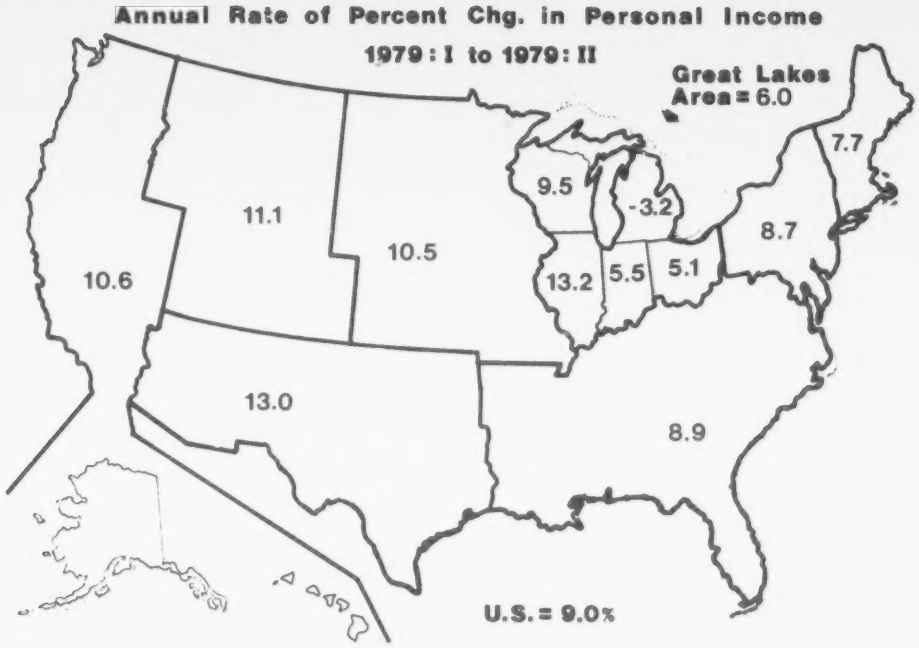
MORTON J. MARCUS

Research Economist
Division of Research

Indiana faces some additional declines in economic activity during the first half of 1980. The state has already experienced a decline in 1979 because of the downturn in automobile sales. Unemployment has risen, employment gains have moderated, and personal income gains have lagged the nation.

The second quarter of 1979 was particularly harsh for the Great Lakes states (see accompanying map and Table 1). Whereas the entire nation had an advance in *nominal* personal income of 9.0% (seasonally adjusted annual rate), the Great Lakes region trailed with only a 6% increase, the lowest of eight regions in the nation. Michigan, Ohio and Indiana, the states with economies most closely tied to automobile production, were hardest hit.

Not only the automobile downturn affected Indiana. Farm proprietors' income was down sharply as prices paid by farmers rose rapidly relative to prices received for their products. This pattern seems to have hit Indiana farmers harder than those across the nation (see Table 2). Wages and salaries in the state



grew by just 3.4% compared with an 8.0% increase nationally. Other areas (notably wholesale and retail trade) fell behind the national growth rates. In durable goods the decline was 5.3%.

An early output of the newly developed Indiana Econometric Model indicates that *real* personal income for Indiana will fall by 1.1% between the second quarter of 1979 and the first quarter of 1980. Thereafter a rise of 3.1% is expected to bring *real* personal income to $28.7 billion in the fourth quarter of 1980 (that would be approximately $52.2 billion in current dollars). We hasten to note that these forecast values are from a model that is being developed by members of the I.U. School of Business faculty. With the prospects of a turnaround in the year ahead, the numbers produced by the model must be used cautiously. As we gain experience with the performance of the model, our confidence in its results will grow.

TABLE 1
Personal Income, Second Quarter 1979
(Seasonally adjusted at annual rates)

		Percent Change From	
	$ billions	*1979:I**	*1978:II*
United States	$1,883.3	9.0%	12.1
REGIONS	–	–	–
New England	105.6	7.7	10.5
Mideast	378.3	8.7	10.3
Great Lakes	370.0	6.0	10.6
Illinois	110.3	13.2	11.2
Indiana	**45.4**	**5.5**	**11.3**
Michigan	82.5	-3.2	7.6
Ohio	92.9	5.1	11.7
Wisconsin	38.9	9.5	12.0
Plains	144.5	10.5	13.1
Southeast	370.4	8.9	12.7
Southwest	164.7	13.0	14.7
Rocky Mountain	50.9	11.1	14.5
Far West**	298.9	10.6	13.7

*Annual Rate
**Includes Alaska and Hawaii
Source: U.S. Bureau of Economic Analysis

TABLE 2
Growth of Personal Income Components
Annual Rates for Second Quarter 1979

	Indiana	*United States*
Total Personal Income	5.5%	9.0%
Transfer payments	12.0	11.2
Dividends, interest, & rents	12.3	11.8
Proprietor's income		
Non-farm	3.0	2.9
Farm	−26.1	−5.0
Wages & Salaries	3.4	8.0
Construction	28.3	23.7
Manufacturing		
Non-durable goods	4.0	6.7
Durable goods	−5.3	3.6
Transportation & public utilities	4.3	2.5
Wholesale trade	5.8	10.5
Retail trade	3.3	6.3
Fin., Ins., & Real Estate	6.3	9.3
Services	11.2	9.2
Government	7.7	7.6

Source: U.S. Bureau of Economic Analysis

At this point, the Indiana Econometric Model indicates a growth of 2.0% in Hoosiers' real personal income for 1980 and an increase of 14,000 jobs by the end of the year. This employment gain will not offset an increase in the labor force, and the annual average unemployment rate is expected to be between 7½% and 8%. During the early part of the year, and in selected counties, considerably higher rates may be anticipated.

In the following pages the expectations of Outlook writers from each of ten areas are presented. The diversity of their views mirrors the diversity of the economic base within the state.

INDIANAPOLIS

ROBERT J. KIRK
Professor of Economics
Indiana University-Purdue University at Indianapolis

This forecast makes some basic assumptions: initially, production and employment will feel the effects of the current restrictive monetary policy; price level will be affected only after a lag. A rising national unemployment rate will cause the household savings rate to rise and expenditures for consumer durables to fall. We shall, therefore, have a period of stagflation—little growth of the economy and inflation continuing at the 9-10% level—in the first half of 1980.

In one sense we are experiencing a two-stage contraction similar to the 1973-75 period. The OPEC oil embargo in November 1973, caused a supply-induced contraction. The fear of shortages encouraged purchasing agents to stock up on inventory. Then demand fell in September 1974, and we had a more traditional demand-induced inventory recession with the trough occurring in March, 1975. This year's gasoline shortage caused a supply-induced contraction again and resulted in a reduction in automobile and automobile-related employment in Indianapolis in the second quarter. The local unemployment rate rose above the U.S. rate.

To forecast the 1980 economy for Indianapolis we start with the assumption that we have already had a supply-induced contraction. The question is, How much more will an industry-diffused, demand-induced contraction reduce business activity? Unemployment in the automobile industry has already reached about 80% of its level in the 1973-75 recession. Therefore, although there is the possibility of further contraction, we have already traveled much of the adjustment path.

The income of unemployed auto workers has been maintained by Supplemental Unemployment Benefits, unemployment compensation, and food stamps. However, many of the 1,400 unemployed Chrysler workers (those with less than ten years seniority) do not receive SUB but could receive benefits under the Trade Act of 1974, which provides aid to American workers who lose jobs because of

foreign competition. The weakness in the automobile industry is reflected in retail sales, which peaked in May 1979.

In 1973-75, we had a "V-shaped" recession nationally–a sharp contraction followed by a strong recovery. This time we expect Indianapolis to have a less severe but more protracted recession. The two sectors of the Indianapolis economy that tend to be highly cyclical are automobiles and construction. We have not yet had a contraction in the latter and so will look more closely at it.

Residential Construction

Apparently 1977 was the peak year in housing permits. Permits were issued for 9,000 units that year, and 80% of the permits were for single-family dwellings. In 1978 permits for about 8,000 units were issued; about 70% of them were for single-family dwellings. Through August 1979 permits were down slightly from 1978. Multi-family units were down significantly until July and August when permits were issued for some large projects.

What about 1980? Single-family units are forecasted to be down about 30% from 1978. Conventionally financed multi-family units will be very limited. In past recessions when builders had difficulty obtaining adequate mortgage money for conventionally financed units, they went to Section 235 and 236 financing. Today the primary federal housing-assistance program is Section 8. In FY1979, there were about 360,000 Section 8-assisted units nationally. However, in FY1980, as part of a federal budget tightening move, the number will drop to 300,000, a 16% drop. Therefore, federally-assisted financing will not serve as a cushion as much as before.

With some conversion of apartments to condos and with low vacancy rates for apartments, we expect that there will be some upward pressure on rents. Certainly the underlying long-run determinants of housing demand remain strong.

Office Space

In suburban areas, about 700,000-800,000 square feet of speculative office space is being constructed. This amount appears to be enough, perhaps more than enough with a softening of the economy, to meet demand. Downtown, the inventory of first-class office space is vanishing. By the time the thirty-seven story American United Life Building is completed in October, 1982, its office space should be readily absorbed.

Light Manufacturing and Warehouse Space

About 500,000 square feet of speculative light manufacturing and warehouse space, for which financing is committed or for which construction has started, will be available for leasing in the spring. For the second half of 1980 the amount of speculative space is less assured because of the uncertainty of financing at this time.

Public Construction

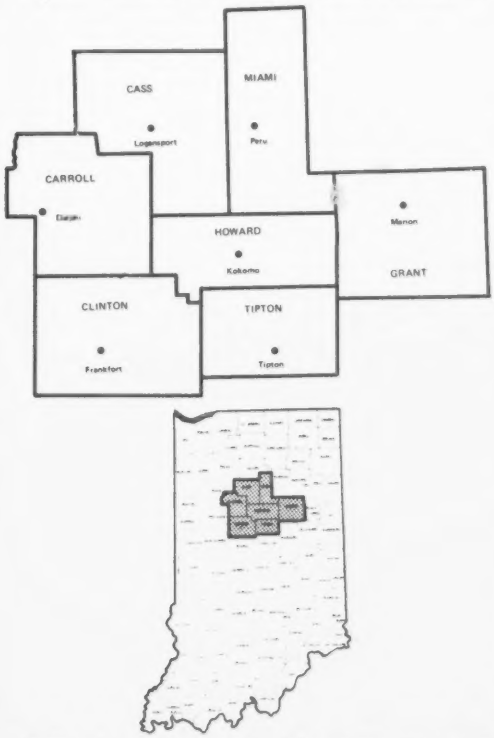
About $43 million of the projected $220 million construction project for a waste-water-treatment facility will take place in the first half of 1980. During 1980, $45 million in construction will occur at Indiana University-Purdue University at Indianapolis.

In conclusion, the automobile industry has contracted. Some contraction is expected in other durable goods industries and in construction. However, chemicals, finance, insurance, and services are important sources of employment stability. The structure of the local economy has been shifting toward the more stable nonmanufacturing sector, reducing the amplitude of cyclical fluctuations. Although government employment was countercyclical in the 1973-75 recession, we do not expect it to be so to such an extent in 1980. Therefore, we expect stagflation in the first half of 1980, and we hope that a short housing cycle will lead the recovery in the second half.

KOKOMO–MARION

DILIP PENDSE
Professor of Economics
Indiana University at Kokomo

This analysis is confined to the seven-county North Central Region of Indiana (see accompanying figures). This region, comprised of Cass, Carroll, Clinton, Grant, Howard, Miami, and Tipton Counties, accounts for about 6% each of



Indiana's population, its labor force, its total employment, its total payroll, and its total establishments.

Howard and Grant Counties, the two giants, the industrial hubs of the region, account for 53% of the region's total establishments, 55% of its population, 65% of its retail sales, and 75% of its total payroll. Nearly 18% of the jobs in Howard County are held by people living in the neighboring counties. On the other hand, nearly a third of the employed people from Tipton and from Carroll Counties, the bedroom communities, hold jobs in the neighboring counties.

In 1977, small establishments having nineteen or fewer employees comprised 89% of the region's 5,590 establishments. Small establishments form the backbone of the economies of Tipton and Carroll Counties by providing 50% of the nonagricultural jobs. In Cass, Clinton, and Miami Counties, small establishments provide 30% to 40% of the area jobs. But in Grant County small establishments provide only about 25% of the jobs, and the percentage falls to 20% in Howard County.

The economies of Howard and Grant Counties depend heavily on the manufacturing sector. Howard County's manufacturing sector accounts for nearly 62% of its total establishment employment. Nearly 56% of Grant County's total establishment employment comes from the manufacturing sector. Since salaries and wages per employee are highest in the manufacturing sector, annual payrolls in these two counties account for a very high proportion of total payrolls in the North Central Region.

Howard County is one of the most affluent counties in the state. Currently, the effective buying income of 71% of the households in Howard County is $15,000 or more. In 1978, Howard County's per capita income ranked second and median household effective buying income ranked third in the ninety-two counties of Indiana.

Major Developments in 1979

In the first ten months of 1979, the following major positive developments took place in Howard and surrounding counties:

1. Chrysler Corporation began work on a $120 million addition to the existing plant in Kokomo.

2. Delco's $11 million plant expansion program made significant progress.

3. Stellite Division of the Cabot Corporation announced its $10 million expansion plan to double the capacity of its cold-strip mill in Kokomo.

4. Penn-Dixie Steel Corporation disclosed its intentions to rebuild its rod mill in Kokomo at a cost of $40 million.

5. Kokomo Economic Development Commission agreed to provide revenue bond money for

the construction of 120 apartment units in the Liberty Manor subdivision,

the construction of a skating rink, and

the opening of another K-Mart shopping center.

6. Several business and government leaders in Tipton county met to discuss the question of how to attract industry to the area.

7. Cass County's Ad Hoc Committee on Population made thirteen recommendations on how to reverse the downward trend in Cass County's population.

8. Cellusuade Inc., a flocking machine manufacturing company, opened its plant in Logansport in Cass County.

9. In June 1979, Southern Strip Steel opened its plant in Peru and created an estimated sixty-five jobs in Miami County.

The following negative developments must also be mentioned:

1. In August 1979, World Color Press in Kokomo permanently closed its doors, causing 500 people to lose their jobs.

2. Chrysler Corporation laid off indefinitely a third of its 6,700 employees.

3. In March 1979, Kokomo lost its air commuter service to Indianapolis, Chicago, and Detroit.

4. Gossard, a garment manufacturer in Logansport, closed its operation, causing seventy-five people to lose their jobs.

5. Memcor, a division of E-System Inc., closed its plant in Peru, causing a loss of 137 jobs in Miami County.

Outlook for 1980

What is the outlook for 1980? Many of the plant expansion programs started or approved in 1979 will be completed in 1980. These expansion programs will increase the productive capacity of existing plants and will provide additional jobs or work hours for area residents. Despite apparent strengths in the operations of Delco, Stellite, and Penn-Dixie, the performance of the North Central Region's economy will largely depend on answers to the following questions:

1. How deep will be the national recession? A deep recession could hurt the auto, steel and related industries. Kokomo and the surrounding areas will feel ripple effects of a downturn in the auto and related industries.

2. How long will the recession last? A mild or moderate but prolonged recession could slowly but surely hurt the region's economy.

3. How soon will Chrysler Corporation receive badly needed financial aid from the federal or state government or from other sources? A recession at the national level and longer delays in granting financial aid to Chrysler Corporation could give this region, especially Howard County, a one-two punch. The longer it takes to receive aid, the more severe the consequences. Already Chrysler's lay-offs have caused Howard County's unemployment rate to climb to 11%. Many of the laid-off workers, who are currently surviving on reduced supplementary funds from Chrysler and on state unemployment benefits, will lose their state unemployment benefits after 26 weeks.

4. How strong will be the demand for area products in foreign markets? A downturn in foreign demand for area products could eliminate some jobs in export-oriented establishments.

TABLE 1: North Central Region's Economy in 1980: A Capsule Summary

County	*Population* (thousands)[1]	*Unemployment Rate*[2]	*Effective Buying Income* Per Capita	Per Household[3]	*Retail Sales* (millions)[3]
Carroll	17.9	4.4 - 7.5%	$7,757	$21,881	$ 36.8
Cass	39.1	6.0 - 12.1	6,872	18,858	186.3
Clinton	30.9	7.0 - 10.6	8,466	21,658	101.5
Grant	83.5	9.0 - 13.2	7,757	22,448	315.9
Howard	90.0	8.0 - 17.3	9,520	27,514	615.9
Miami	39.1	7.0 - 14.0	6,133	16,911	90.9
Tipton	15.9	6.0 - 11.7	8,594	23,426	36.7
North Central Region	**316.4**	**7.3 - 13.6**	–	–	**1,384.0**

[1] Based on population projections made by the School of Business, Indiana University, Bloomington.
[2] Depending on severity of recession and how soon Chrysler Corporation receives financial aid.
[3] Based on past estimates prepared by *Sales and Marketing Management*.

The probable economic performance of the North Central Region is as follows (see accompanying table):

Population: Total population of the region will reach 316,400.

Employment: The unemployment rates in the region will vary from county to county. The effects of recession and continued Chrysler layoffs will be felt by all counties. Employment will drop in auto, home building, and transportation industries. Prolonged recession could result in layoffs in fast food and service industries. Small businesses will cut back on or simply freeze new hirings. Blue-collar male workers, minorities, females, young people and teenagers will bear the brunt of an economic slump.

Nonfarm Income: Although incomes will rise because of two-income families, inflation, and higher wage contracts, the rate of increase in income will be lower than in recent years because of layoffs and reduced overtime work.

Farm Income: Strong world demand could keep area farmers' incomes high.

Retail Sales: Although dollar volumes will be high because of inflation, consumption spending will be dampened by layoffs, reduced overtime, and an uncertain future. Demand for such goods as appliances, TV sets, radios, and automobiles will be lower than before. People will defer such purchases until the economic picture brightens.

Housing and Construction Market: As a consequence of high interest rates, increasing costs of labor and material, and reduced demand for homes, there will be (1) a slowdown in the construction of new houses, (2) an increase in the average time required to sell either new or existing houses, and (3) a reduction in home improvement expenditures.

Business Expansions: Small business establishments are likely to defer their expansion plans until the cloudy economic atmosphere becomes somewhat brighter.

Overall, the North Central Region's near economic future is clouded with uncertainty. This region's economy is very sensitive to national economic trends and is heavily dependent on the manufacturing sector. When the manufacturing sector sneezes, the region's economy catches cold! A near replay of the 1974-75 recessionary slowdown might force leaders, planners, and citizens to consider diversifying the economic base or making economic development plans for the entire region in order to avoid future seesaw growth patterns.

TERRE HAUTE

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Tomorrow's Terre Haute weather can be forecast tolerably accurately by looking at Saint Louis today and adjusting for a climate that is slightly less warm and slightly less wet. Future clothing styles may be anticipated by looking at New York or California designs, but observing that fashions become muted and more sensible when they arrive here.

Turns in employment and output in Terre Haute also tend to lag the national economy, but the amplitude of swings tends to be less extreme. During the last recession the national unemployment rate stood at 4.8% in September 1973; a year later it climbed to 5.9%; and for calendar 1975 it averaged 8.5%. In contrast, the rate actually fell in the Terre Haute SMSA between September 1973, and September 1974–from 5.0% to 4.4%–and for calendar 1975 it averaged 6.8%. We should not expect radical changes in the employment level or in the price deflated income of the Terre Haute area for 1980.

Relative stability in local business activity stems, at least in part, from low reliance on durable goods manufacturing–15% of establishment employment in the Terre Haute SMSA, as opposed to 25% statewide. Virtually none of that activity is directly related to the automotive industry.

The employment situation has deteriorated over the past year, however, and the deterioration has been in manufacturing. By August, the seasonally adjusted unemployment rate, 6.6%, slightly exceeded the national average. In Clay County, which has the highest area unemployment, jobs created by some new industry have been more than counterbalanced by job losses in mobile homes manufacturing and in the clay and brick industry. The Quaker Maid facility of A & P has closed in Vigo County. That county's single biggest employer, the Record and Columbia House Divisions of CBS, has been hit by the well-publicized slump in record buying. This year's unemployment increase seems to be largely the result of random shocks, and does not seem to presage further manufacturing setbacks for 1980.

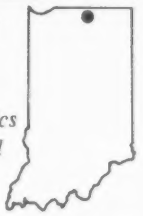
Agriculture is often a source of instability in local business conditions. Local merchants and farmers are cheered by a most unusual combination of a good harvest at good prices.

Construction activity also affects local business conditions. Industrial construction in the area should remain at historically high levels through 1980. Three massive, ongoing industrial projects dominate the local scene; Eli Lilly in Clinton, Hercules in Terre Haute, and the REMC generating complex at Merom Bluff. Residential construction will be buoyed by the conversion of the Terre Haute House into housing for the elderly and by the construction of a Westminster Village retirement community. Single-family residential construction is another story. Seventeen percent construction loans and 13½% mortgages *have* hit Terre Haute. Those not actually squeezed out of the housing market *are* having second thoughts. Construction permits in Vigo County *did* fall about one third on a year-to-year basis even before the recent jump in interest rates. Any recession in the housing industry in 1980 may well affect Terre Haute, but the industrial expansions will keep overall construction figures high.

Consumers' concerns about inflation, high interest rates, and a possible recession have made them cautious. Real estate and automobile sales, which held up quite well through the twists and turns of rising interest rates and gasoline shortages, fell dramatically, roughly coincident with the October announcement of the change in Federal Reserve policy. General merchandise sales, particularly of big ticket

items, have been low. Sales will remain low in 1980. The Terre Haute area shared the national inflation, and was affected by some rise in local unemployment in 1979. Although 1980 is unlikely to be better, it is also unlikely to be much worse.

SOUTH BEND–ELKHART



JOHN PECK
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Economic activity in the South Bend area has continued to moderate since exhibiting unexpected strength in the first quarter of 1979. Conditions are more on the critical side in the Elkhart area because of a significant reduction in the nation's demand for recreational vehicles and related products. The RV industry is a major component of Elkhart's industrial sector.

Tables 1 and 2 give various indicators of local economic activity for the South Bend and Elkhart communities. The figures contained in the tables are seasonally adjusted and, with the exception of the unemployment rates, are index numbers expressed as a percentage of 1967 base year values.

South Bend Table 1 shows that industrial electricity sales and commercial and industrial natural gas sales were at comparable levels in August 1979 and August 1978; however, the latest index numbers in each case are significantly lower than both year-to-date averages and peak values attained in the first quarter of this year.

Minimal change is noted when August 1979 employment data indices are compared with year-to-date figures and average performance in the previous year. Recent reductions in employment, however, caused the South Bend SMSA unemployment rate to increase dramatically in July and August. The August figure of 6.8% was a full percentage point above the 1978 average and more than two percentage points higher than the 4.6% level of February 1979.

An automobile and housing market decline, mirroring similar national trends, is an important factor in the softening of economic activity in the South Bend area. Recent auto and truck sales indices are at their lowest levels since the 1975 downturn and are about 35% below the levels of just one year ago.

The volume of housing activity peaked in the fourth quarter of 1978. The year-to-date index of new housing permits issued in August 1979 was some 40 index points below the average obtained for calendar year 1978.

In summary, indicators covering the twelve-month period ending in August 1979 suggest that South Bend is experiencing: a softening in the sales of energy to local businesses; a significant increase in the unemployment rate; and substantial reductions in auto and truck sales and in the number of new housing permits issued.

Elkhart Table 2 gives selected economic indicators for the Elkhart area. As in South Bend, the level of sales of industrial electricity and commercial and industrial natural gas in Elkhart was comparable for August 1979 and August 1978, but the most recent index numbers are well below year-to-date averages and the peak values reached earlier in the year.

Employment and unemployment data trace a similar pattern of decline through the last six to eight months. The August unemployment rate in Elkhart, 10.0%, was some six percentage points higher than the lows of 4.1% reached in January and February 1979. This very large increase results, for the most part, from a major reduction of activity in the recreational vehicle industry. Two thousand seven hundred fewer members of Elkhart's 73,600 member work force were employed in the RV industry in August 1979 than in August 1978.

Data covering auto and truck sales in Elkhart are not presently reported through IUSB's Bureau of Business and Economic Re-

TABLE 1
SELECTED INDICATORS FOR SOUTH BEND (Seasonally adjusted: 1967 = 100)

Indicator	*Average 1978*	*Average Jan.-Aug. 1979*	*August 1978*	*August 1979*	*Percent Change Aug. 1978-Aug. 1979*
Industrial electricity sales[1]	106.9	128.5	110.4	120.0	8.7
Natural gas sales[2]					
Commercial	140.1	149.1	135.7	133.8	−1.4
Industrial	88.9	100.8	89.6	89.4	−0.2
Employment Data[3]					
Nonagricultural employment	113.5	119.3	113.1	118.2	4.5
Manufacturing employment	91.9	94.9	92.9	94.1	1.3
Nonmanufacturing employment	127.0	134.6	125.6	133.4	6.2
Help wanted index[1]	166.4	147.0	178.7	122.8	−31.3
Unemployment rate[3]					
(% of work force)	5.8	5.6	5.9	6.8	–
New passenger car sales[3]	135.7	118.1	139.3	88.0	−36.8
New truck sales[3]	335.8	242.5	317.7	205.7	−35.3
Construction data[4]					
Estimated value of new housing permits	407.3	307.7	368.1	275.1	−25.3
Number of new housing permits issued	160.0	117.7	138.5	106.3	−23.2
Average value per new housing permit	265.0	280.9	290.6	289.6	−0.3

[1] South Bend
[2] St. Joseph County
[3] South Bend SMSA
[4] St. Joseph County excluding the cities of South Bend and Mishawaka.

SOURCE: Bureau of Business and Economic Research, Indiana University at South Bend.

search, but another important indicator of major consumer purchases–housing activity–is found in Table 2. Note that the year-to-date index of new housing permits issued was 60 index points below the 1978 average.

As with South Bend then, all available indicators–sales of energy, employment, and housing–suggest that Elkhart is in a period of economic recession. The recession in the RV industry has had a strong impact on Elkhart and neighboring communities.

Outlook As a part of the November-December, 1978 *IBR* Outlook, I predicted "unspectacular performance in 1979" for the South Bend-Elkhart area economies. In the May-June, 1979 *IBR* Mid-Year Review, I suggested that these economies would be "adversely affected whether or not the national economy avoids a near term recession." This is essentially what has happened, and I see no reason to revise the prognosis. Data more recent than our published indicators point to a continuing decline in housing construction (down some 25% in October), and a further decline in manufacturing employment (down 300 jobs in September) in South Bend with no gains in durable goods manufacturing for a third consecutive month. The employment picture is expected to deteriorate further in the next few months. Bright spots include a vigorous non-residential construction sector in South Bend, and a relatively stable nonmanufacturing labor force in Elkhart. The first two to three quarters of 1980 should be a period of continued decline and slow recovery.

TABLE 2
SELECTED INDICATORS FOR THE ELKHART AREA (Seasonally adjusted: 1967 = 100)

Indicator	*Average 1978*	*Average Jan.-Aug. 1979*	*August 1978*	*August 1979*	*Percent Change Aug. 1978-Aug. 1979*
Industrial electricity sales[1]	150.4	164.4	152.8	160.2	4.8
Natural gas sales[1]					
Commercial	161.2	174.5	139.8	137.9	– 1.4
Industrial	236.7	271.8	251.2	222.8	–11.3
Employment data[2]					
Nonagricultural employment	177.2	175.6	177.3	167.9	– 5.3
Manufacturing employment	141.1	136.9	139.9	128.5	– 8.1
Nonmanufacturing employment	260.0	265.1	262.1	257.1	– 1.9
Unemployment rate[2] (% of work force)	4.9	7.2	5.4	10.0	–
Construction data[3]*					
Estimated value of new housing permits	303.9	287.1	271.4	322.2	18.7
Number of new housing permits issued	198.3	138.0	192.3	136.0	–29.3
Average value per new housing permit	179.6	210.8	180.4	251.8	39.6

[1] City of Elkhart
[2] Elkhart SMSA
[3] Elkhart County excluding the cities of Elkhart and Goshen.
* All construction data had base year 1970 = 100.

SOURCE: Bureau of Business and Economic Research, Indiana University at South Bend.

EVANSVILLE

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Despite an earlier prediction, the Evansville regional economy is not expected to experience a recession in 1979. However, the quarterly variation in economic activity will create a different pattern than that of the national economy. The national economy had strong first and third quarters with a weak second quarter and probably a weak fourth quarter. In Evansville, the first quarter was very strong, after accounting for seasonal factors. The second and third quarters both declined in general economic activity, but there might be a slight upward growth in the fourth quarter.

Expressed in terms of the Evansville Area Business Index, the first quarter index was 149.30 (1967-69 = 100), but the second quarter index dipped by 0.9% to 148.00. In the third quarter the index is expected to decline to 144.97. Reductions in autos and durable goods, sales, fuel shortage, and a few incidences of labor dispute contributed to these declines. In the fourth quarter, the settlement of labor disputes, strong construction activities, stable financial activities and a stable employment level should hold the regional economy above the third quarter. If the national economy experiences weak demand, the fourth quarter regional index could show a decline, but that probability is not expected to be high.

Thus, 1979 should show slight growth over 1978. An increase of about 3% is estimated for the 1979 index. (See Table 1.) Over the whole year, industrial production, trade and services, construction, transportation and financial sectors all showed some growth rates over their 1978 levels. Employment in 1979 will hold about the same level of 1978. Except for the national decline in demand for home appliances, the demands for goods and services produced in the Evansville area will suffer little or not at all because of a well-diversified industrial structure.

The national economic picture for 1980 is blurred by many potential uncertainties. Energy costs will certainly rise since national programs have not increased the supplies of existing and alternative energy sources. Inflation will continue in 1980 and future years. The rate of inflation could ease somewhat in 1980 if food costs remain stable and if the interest rate declines sometime after mid-year.

Given the above assumptions about the national economy, the 1980 Evansville economy will stay at about the same level of 1979 or will improve slightly. The Evansville Area Business Index is projected to have 1% growth rate with an allowance of 1% either way. That is, if the total demand is strong, the regional economy may grow by 2%; but if the total demand is weak the regional economy will stay stagnant with no growth. Some positive factors should help Evansville's economy, however. The construction projects of the Riverview Commerce Center and a large shopping center on Green River Road will undoubtedly boost the regional economy by increasing trade and services activities. The unemployment rate in the region was the second lowest among all SMSA's in Indiana for August 1979 (5.7% in comparison to the national 6.0% and Indiana's 7.3%).

No significant weaknesses are observed in all the industries and sectors of the regional economy. In other words, the Evansville area's supply capabilities seem to be sound; the only worries will be on the demand side.

EVANSVILLE AREA BUSINESS INDEX (1967-69 = 100)

	Industrial Production	*Trade & Services*	*Construction*	*Transportation*	*Finance*	*Employment*	*Composite Index*
Annual							
1977	148.38	125.63	125.86	104.55	268.52	103.87	136.60
1978	147.38	128.22	160.82	110.97	315.96	105.74	142.53
1979*	156.04	127.83	163.32	111.38	343.41	105.70	146.94
1980†	158.00	128.00	165.00	111.50	360.00	104.80	148.47
Monthly (1979)							
Jan.	153.04	131.01	195.28	112.26	345.55	103.89	149.17
Feb.	159.13	134.33	182.16	112.54	321.22	104.81	150.70
Mar.	154.97	127.43	181.52	112.76	347.69	105.48	148.09
Apr.	163.13	127.42	162.41	98.55	355.66	104.12	149.09
May	158.32	127.51	154.26	114.47	339.31	105.17	146.98
June	159.40	126.66	160.94	112.48	344.30	106.50	147.94
July	168.36	125.04	156.37	112.36	335.20	107.09	150.36
Aug.	141.25	127.37	153.54	115.58	354.94	106.48	140.90

*Estimated
†Projected

RICHMOND

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Despite national economic conditions the Richmond area economy continues to show strong resiliency. A concerted intentional effort is underway to build inventories, and that has resulted in increased sales and orders in several industries, especially manufacturing, retail service, and broadcasting. In some enterprises tighter consumer credit will have its expected impact, but, given the mood of cautious optimism, this impact can be partly offset. The building trades and automotive retail outlets are expected to bear the brunt of such impact.

Most employers anticipate a moderate job climate during the coming months. The current unemployment rate of 5.9% may worsen if there are industrial layoffs, energy bottlenecks, and tighter consumer credit controls. Further, improvement in labor management relations and in air quality standards is vital to the continuing stability of Wayne County's economy which employs about 37,000 persons.

The need is critical for more trained personnel in engineering, electrical, industrial, mechanical, management, clerical, health, and craft related occupations. A positive response to such need by our educational institutions can brighten the employment picture.

Furthermore, utilities (gas, electricity, water, and telephone) have shown modest increases in consumption rates compared with last year. The natural gas consumption rate was in the forefront with a 29.7% increase followed by electricity (5.0%), telephone (2.3%), and water (0.5%).

At the end of August 1979, the city's financial institutions (commercial banks and savings and loan associations) held total deposits of $405,078,082 reflecting an 8.2% increase over the last year. They expect the present trend to continue.

For Richmond, the economic outlook for 1980 is cautiously optimistic.

MUNCIE–ANDERSON

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December 1978 apparently marked the end of a prolonged "growth cycle" that started in March 1975. Whether 1979 will be called a year of recession or of stagflation primarily rests on how the economy fares during the fourth quarter. Real GNP was no higher at the end of the third quarter than the first, suggesting that the economy lost its forward momentum during the past winter. The negative 2.3% real growth in GNP during the second quarter dovetails well with my analysis published in the May-June *IBR*. On the other hand, the preliminary estimate of 2.4% real GNP the third quarter is not as surprising as the resurgence of final sales, which creates uncertainties as to how much buying power the consumer retains. In these times of rising inflationary expectations the consumer's behavior remains elusive. Nevertheless, recessionary forces continue to gain momentum. Among those forces are the continuing erosion of real disposable income in the face of relentless inflation, the dwindling supply of mortgage credit to finance housing in an environment of surging interest rates, taut corporate liquidity, the Fed's credit tightening moves, and the auto sales slump.

Hence, real GNP will probably show a decline during the fourth quarter. The rubric, "recession," is likely to be applied to the period beginning April 1979 and extending through the first, possibly the second, quarter of 1980.

ANDERSON

For many Anderson auto workers the recession *is* now a reality. As I indicated in the May-June *IBR*, total auto sales for 1979 will be substantially below the 1978 IU forecast of 10.9 million. Of Anderson's two GM divisions, Delco Remy will be hit hardest by declining sales. As of November 3, approximately 1,400 workers have been idled at Delco Remy and Guide divisions, but only 200 are from the latter.

Delco Remy has been Madison County's largest employer for almost all of its fifty-two years in Anderson. Employment at the sprawling 550-acre, sixteen-plant Delco complex totaled 16,200 in 1967 but had dropped to 15,200 in 1978. Although management claims that $190 million has been invested in these Delco plants in 1977-78, workers argue that some of their machinery is old and is too obsolete to compete with new equipment installed in southern plants. Indeed, since 1975 Delco has concentrated most of its expansion of production facilities in the South—a new plant opened in Meridian, Mississippi in 1975; a Laurel, Mississippi plant commenced operations in 1977; and a generator plant is nearing completion in Albany, Georgia. Delco is also going overseas—officials recently announced that a plant will be built in France.

GM's Guide division provides a relatively sharp contrast to Delco Remy. Guide added over 500 employees to its payroll in 1977, and may add another 400-500 jobs between 1980-81 when a new plant comes on line. Guide employs roughly 6,000 workers in its Anderson complex and another 1,000 at its Monroe, Louisiana plant. While Delco's labor relations have been characterized by confrontation (currently a strike threat exists because of local contract issues), Guide management appears to have achieved a greater degree of cooperation from local union leadership.

The fact that 38% of Anderson's employed labor force is working for these two industrial heavyweights is a mixed blessing. The exodus of manufacturing firms from Anderson in recent years—i.e., Howe, Sprague, Anaconda, and Nicholson File—must, to some degree, relect their inability to compete with GM's wage and benefit package. Obviously that package, which averages over $15 per hour, also inhibits Anderson's ability to attract new manufacturing firms.

Between September 1978 and September 1979 Anderson's employed labor force (seasonally adjusted) declined from 57,400 to 54,900 and unemployment rose from 6.4% to 9.4%. If auto sales remain in the doldrums for the balance of the quarter (and this analyst believes that they will), significant additional layoffs are likely before Christmas, and unemployment will probably remain relatively high through much of the coming year.

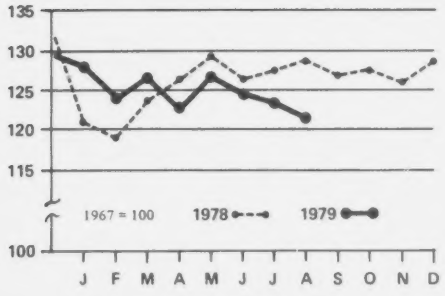
MUNCIE

Data through August for the Muncie Business Index* show a downward trend in 1979. Manufacturing appears to have borne the brunt of the decline (see accompanying table and figure), but if allowance is made for the impact of the Westinghouse strike, the decline appears to have affected all sectors of the index quite evenly. Overall the composite index dropped 2% from July and was roughly 6% below its January level. Retail and service sector gains

TABLE 1 Muncie Business Index

Sector	*August 1979*	*Change from Previous Month*
Manufacturing	101.0	-3.1
Retail & Services	124.3	-1.5
Government	165.4	-1.2
Financial & Real Estate	114.3	-1.6
Composite	**121.7**	**-2.0**

*Data for the Muncie Business Index are compiled by Ball State University's Bureau of Business Research under the aegis of Dr. Joseph Brown.



MUNCIE BUSINESS INDEX*
(seasonal and inflationary effects removed)

were negative after seasonal adjustment, and auto and truck sales were 23% less than in August 1978. Department store sales were off 11% from August 1978. New housing completions were off 23% and deed recordings down 11% compared to August 1978.

A new zinc-oxide battery might have a *favorable* impact on Muncie's economy. Much of the credit for the breakthrough in battery technology goes to Delco Remy's engineering center in Anderson. This technological breakthrough allows development of relatively light zinc-oxide batteries which can store, pound for pound, two to two and one-half times as much energy as conventional lead-acid batteries. The zinc-oxide batteries are designed to power small mass-produced electric cars slated to be available by the mid-1980s. Delco officials have not yet announced where the new batteries will be produced, but a small section of Muncie's new Delco Battery plant has been used for pilot production of zinc-oxide batteries since the plant was completed in June, 1978. This plant, located in Muncie's Industrial Park, has adequate space for expansion. The Muncie location is excellent because it is close to Delco's engineering center in Anderson, and reasonably close to Detroit. Clearly, both Muncie and Anderson would benefit from a decision to produce zinc-oxide batteries in Muncie.

Muncie's employed labor force as of September 1979 was 51,700, a decline of 1.3% during the past year and more than 3% below the September 1977 level. In September 1979 Muncie's unemployment rate stood at 7.7%, significantly lower than Anderson's.

Muncie's economy is considerably more diversified than Anderson's. Durable goods production accounts for only 36% of its personal income as opposed to 60% for Anderson. Muncie's three largest manufacturing firms combined employ fewer workers than Anderson's Guide division, which in turn is dwarfed by Delco Remy. Muncie has many small business firms (i.e., a large number of machine tool shops) that manufacture producers' durable equipment and that contract with larger firms producing consumers' durable goods or components for durable goods (i.e., auto transmissions and auto batteries). For such firms a downturn in orders is followed in a few months by a decline in sales with similar changes in production lagging somewhat further behind. Thus, given the economic slowdown registered during the second quarter of 1979, production and employment are likely to be sustained for an additional quarter or two, due to lagged effect asociated with durable goods production. That being the case, Muncie's unemployment totals may well move higher in late 1979 and the first quarter of 1980.

JEFFERSONVILLE NEW ALBANY (Louisville Area)

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Stagflation seems a particularly apt term for describing the local metropolitan economy as 1979 draws to a close. Prices and interest rates have, of course, been rising sharply, while other indicators of economic activity have exhibited slow growth or decline for the past several months.

TABLE 1

INDEX OF LOUISVILLE AREA BUSINESS ACTIVITY

	Sept. 1978	*March 1979*	*June 1979*	*Sept. 1979*	*Quarterly Average, 1979* *I*	*II*	*III*	*Change in Index QI to QIII*
Industrial production	113.7	123.8	113.3	113.7	125.5	122.6	118.4	−7.1
Transportation	187.4	185.9	187.2	181.2	182.0	191.9	187.0	+5.0
Trade and services	143.5	154.9	148.0	153.1	151.4	149.8	148.8	−2.6
Construction	165.8	144.0	149.8	156.1	152.4	143.5	150.5	−1.9
Financial	342.0	343.8	357.7	374.8	346.6	365.3	375.6	+29.0
Employment	132.8	137.4	137.2	137.9	137.5	137.5	137.6	+0.1
Composite Index	**156.8**	**162.8**	**161.0**	**162.3**	**162.9**	**163.6**	**163.1**	**+0.2**

1967 = 100 (seasonally adjusted)
SOURCE: Research Department, Louisville Area Chamber of Commerce

The seasonally-adjusted indexes in Table 1 demonstrate the generally sluggish state of the economy during 1979. From the first quarter to the third quarter of 1978, the composite index rose by 19.9 points; during the same period this year, the composite index rose only 0.2 points. Of the six individual indexes, three rose between the first quarter and the third quarter, while the other three declined.

Industrial production sagged somewhat this year. The production index dropped steadily from the first to the third quarter, and average manufacturing employment fell by more than 2,000 workers during that period. Layoffs at the Ford LTD plant, General Electric, and other durable goods manufacturers contributed to these declines, but cutbacks were by no means confined to the durable goods sector. According to Kentucky Department for Human Resources estimates, the average weekly hours worked on production jobs were virtually the same in the first and third quarters of 1979 but were noticeably lower than a year ago. This September, for example, the average workweek was 39.7 hours, compared with 40.5 hours in September 1978.

Total employment in the five-county metropolitan Louisville area rose during the first few months of the year and then leveled off. Except for a brief gain in July, nonfarm employment remained almost stationary, at about 414,000 workers, from May to September. The area gained about 8,700 nonagricultural jobs during the twelve months ending September 1979. Ordinarily, the Louisville area adds about twice that number of jobs in a year; between September 1977 and September 1978 the gain was an unusually high 26,000 jobs. In Clark and Floyd Counties, the Indiana portion of the SMSA, the number of nonfarm jobs rose by only 1,000 in the September 1978-September 1979 period. This was approximately half the typical employment increase of recent years.

The metropolitan area unemployment rate (not seasonally adjusted) fell steadily from 6.2% in January to a low of 4.2% in May, then settled in the 5.0% to 5.4% range, except for a jump to 7.1% in the month of August—the only time since 1976 that the area-wide unemployment rate has been that high. The estimated unemployment rate for residents of Floyd and Clark Counties, bottomed at 5.2% in April, remained close to 5.5% for the next few months, and then jumped to 7.2% in August, the latest month for which that statistic was available.

Retail sales appear to have been rather sluggish this year. The trade and services index rose a healthy ten index points from September 1978 to September 1979, but most of that growth came in late 1978. This year the index averaged slightly lower in the third quarter than in the first quarter. Local department stores have held a record number of special sales throughout the fall. Although these special sales

TABLE 2
EMPLOYMENT AND UNEMPLOYMENT IN THE LOUISVILLE-JEFFERSONVILLE-NEW ALBANY AREA, SEPTEMBER 1978-SEPTEMBER 1979*

	Sept. 1978	*March 1979*	*June 1979*	*Sept. 1979*
Clark and Floyd Counties				
Total nonfarm employment	45,200	44,500	45,800	46,200
Manufacturing	12,200	12,300	11,900	11,700
Nonmanufacturing	33,000	32,200	33,900	34,500
Residents unemployed	3,600	4,100	4,000	5,100†
Unemployment rate	5.3%	5.9%	5.7%	7.2%†
Louisville Metropolitan Area‡				
Total nonfarm employment	405,100	402,800	413,600	413,800
Manufacturing	110,800	108,400	107,700	108,500
Nonmanufacturing	294,300	294,400	305,900	305,400
Residents unemployed	19,300	20,100	20,800	23,000
Unemployment rate	4.6%	5.0%	5.0%	5.4%

*The employment data refer to establishments located within the area cited and include workers on strike; the unemployment data refer to residents of the area cited and are not seasonally adjusted.
†August, 1979 (latest figures available).
‡Includes Floyd and Clark counties in Indiana, and Jefferson, Oldham, and Bullitt counties in Kentucky.
SOURCES: Indiana Employment Security Division; Kentucky Department for Human Resources.

may indicate a need to bolster sagging consumer demand, they also probably reflect the high interest cost of holding large inventories and, given the widespread anticipation of recession, merchants' desires to sell as much as possible before discretionary incomes fall.

Compared with the other indicators, the thirty-three point rise in the financial index between September 1978 and September 1979 makes it appear that banking activity has been unusually vigorous. That gain, however, was far smaller than in other years, and only about one third of the increase that the financial index recorded during the preceding twelve months. Bank lending has been falling off, with mortgage loans and consumer loans falling sharply in October. Some financial institutions face liquidity problems as depositors reduce their non-earning or low-interest accounts to seek a better hedge against double-digit inflation. However, high interest rates—which reduce both the demand for long-term loans and the number of borrowers that banks consider capable of handling loans—are primarily to blame. Mortgage rates have risen from the 9¾-10½% range in November 1978 to a range of 11¾-14½% early this November. Several banks and savings and loan associations have stopped making mortgage loans, while many others require 20-25% down payments.

Not surprisingly, housing sales, which were strong through much of 1979, have recently fallen off, particularly in southern Indiana. Speculative home building has declined sharply, but construction as a whole has risen through much of the year, though it remains below the record levels of 1978.

All in all, the local economy, like the national economy, appears to be on a plateau which foreshadows either a business cycle downswing in 1980 or simply another year of little or no growth. National events will determine the outcome, but a downturn seems more likely at present. Historically, recessions hit the Louisville area one or two quarters after the national economy turned down; this year there does not seem to be a similar lag.

Whichever scenario occurs, unemployment will be higher in 1980. Total employment is likely to increase very slowly over the year, or it may even decline somewhat. Retail sales are likely to be rather weak, unless other aspects of the economy improve significantly. The virtual collapse of construction helped precipitate and intensify the 1974-1975 recession; construction should not fare too badly this time. Although single-family-home construction is unlikely to pick up until interest rates recede, building permits have been issued for extensive condominium development. Several major construction projects—Shippingport Square, the Performing Arts complex, the Galleria—are underway or about to start in downtown Louisville, and community projects, especially schools, will bolster the construction sector in Clark and Floyd Counties.

Thus, the overall outlook is for a decline in the area economy during 1980, but only a moderate decline.

GARY–HAMMOND EAST CHICAGO (Calumet Area)

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A year ago we predicted that there would be no recession in 1979 in Northern Indiana. We also predicted that the local steel cycle would still be rising in 1979 and would probably crest sometime in 1980. From all indications, this forecast may continue to be correct in spite of some minor soft spots induced by the unexpectedly sharp downswing in auto orders. Structural steel continues to more than hold its own and may keep the cycle on an upswing at least until the first or second quarter of 1980, when capital formation may slow down and ultimately recede. Compensating forces, nonetheless, keep the regional steel cycle from dipping deep as, first, autos rebound and, subsequently, construction and public contracts accelerate.

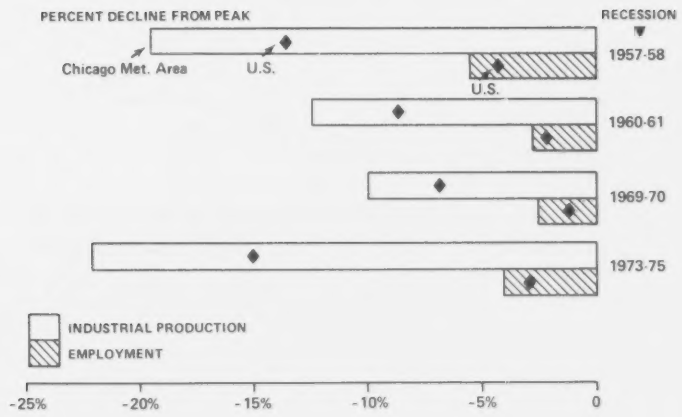
The automobile industry has had some product-mix and product-planning problems. Adverse consumer reactions, coupled with declining consumer liquidity, contributed to the downturn in auto sales. We expect autos to overcome their current product-mix and marketing difficulties by mid-1980. Moreover, as consumer liquidity begins to rise in 1980, after a brief adjustment period during which consumer purchases of durables decline, auto sales will recover, aided by expansionary monetary and fiscal policy.

Steel will lag autos somewhat because of an unexpected slowdown in capital formation and a slight decline in machine tools, probably in the middle of 1980. The local manufacturing index will be affected by rising food prices which traditionally crowd out consumer financial resources that would have been spent on those durables underlying the local economy.

In 1980 steel may also suffer from technological lags and a cost-price squeeze. Nationally about 86% of raw steel is poured from modern facilities, BOF and electric. Even with modern facilities in Porter County, Northern Indiana is beginning to lag some national steel-producing counties. Our region is sensitive to energy shocks, which are likely in 1980.

Residential construction is on a downtrend and will continue sagging for much of 1980. The current boomlet in commercial construction, with small retail establishments springing up throughout Lake and Porter counties, will subside early in 1980 and will subsequently recede. Industrial construction has shown very little life; however, this cycle may rebound in the second and third quarters of 1980.

National forecasters often use so-called leading indicators to predict the timing of future recessions. An alternative method would be to use the indexes from regions in the U.S. where business activity declines before the



national cycle turns down. Our local index would serve well as such an indicator. In all major postwar recessions the local index turned down ahead of the national peak; moreover, the local index never gave false signals as did national leading indicators in 1967 and in 1978. In the 1957-58 recession the local index led by six and one-half months; in 1960-61, over three months; in 1969-70, over six months; and in 1973-75, almost seven months. There was no clear local downturn in 1978; thus, we confidently predicted no recession for most of 1979. Currently we are experiencing what appears to be a downturn; thus, with some trepidation, we might predict a decline from the national peak for about the middle of 1980 or sooner, if extraneous shocks or uncertainty concerning future monetary policy persist.

As firms find it increasingly more difficult to maintain profits by raising productivity and cutting real wages by rapidly inflating prices, they will, in 1980, bring new direct pressures to bear on unions to reduce labor costs. Locally American Bridge is pointing the way; they may be followed by U.S. Steel and the Budd Company.

If a recession unfolds, the local economy will take longer to regain its forward momentum. In 1957-58 the local index lagged the national upturn over five months; in 1960-61 the lag was almost four months; in 1969-70, the lag was over four months, and in 1973-75 the lag was over twelve months. We are still considerably below our 1973 peak: (the local Bell index was at 109 in April-May 1973; the index averaged 107 in the current quarter).

Our analysis of interdependent series suggests that the 1980-81 recession may follow the 1969-70 profile. The adjoining chart, prepared by the Illinois Bell Economic Research division, shows the relationship between recessionary reductions in local output and the concomitant effect on employment. Clearly the effect on local jobs will be much less than would be indicated by the slowdown in production.

In the 1973-75 recession, steel employment dropped 11.29% and fabricated metals dropped 28.13%, yet total employment actually increased by 1.86%. Thus, we would expect continued growth in nonmanufacturing employment in 1980 to more than offset an anticipated loss of about 9% in manufacturing.

A survey of local firms' expectations for 1980 was conducted by fifty-five business students at Indiana University Northwest. In general, 1980 is viewed favorably, but faster price increases are expected. A simplified tabulation of the results follows.

	Manufacturing	Construction	Autos	Transportation	Retail	Utilities	Finance and Insurance
Moderate or significant growth expected in 1980	65%	34%	72%	32%	66%	75%	94%
No growth or decline expected in 1980	35%	66%	28%	68%	34%	25%	6%
Moderate or significant growth experienced in 1979	44%	86%	67%	30%	78%	65%	94%
No growth or decline experienced in 1979	56%	14%	33%	70%	22%	35%	6%
Prices or rates expected to rise as much or more than in 1979	89%	52%	83%	67%	89%	74%	38%
Prices or rates expected to rise less than in 1979	11%	48%	17%	33%	11%	26%	62%
Prices in 1979 rose as much or more than general price level	62%	93%	55%	5%	62%	95%	83%
Prices in 1979 rose less than general price level	38%	7%	45%	95%	38%	5%	17%

FORT WAYNE

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Over a year ago, on November 2, 1978, the Federal Reserve announced a series of policy changes "...to strengthen the dollar and thereby counter continuing domestic inflationary pressures." This policy implied controlling the growth rate of the money supply (M_2) and was successful to the extent that growth fell from a 9.5% annual rate in March-November 1978 to a 4.7% rate in November 1978-March 1979. Accordingly, the economy lost momentum (as predicted in the 1979 Outlook), falling from an annual growth rate of 5.6% in 1978:4 to a negative 2.3% in 1979:2. By May, however, the Federal Reserve had forgotten its promise (which was not assumed in last year's forecast). The money supply exploded, growing at a 12.9% annual rate from May-September 1979, and the economy responded (which was not forecast) by growing at a 2.4% annual rate in the third quarter.

Growth rates in the money supply were even higher than before the November 1978 policy shift. Inflation was rampant largely because of the sustained, excessive growth rate in the money supply over the last several years. Therefore, on October 6 the Federal Reserve announced yet another new policy to control directly the runaway growth rate in the money supply. Thus, as the economy enters 1980, the process of "drying-out" will start again. Because of its relatively high employment in durable goods manufacturing, the Fort Wayne area will bear a disproportionate share of this "drying-out."

Will the Federal Reserve reverse its "tight money" policy in time to reverse the "drying-out" of the national economy before the end of 1980? The current Federal Reserve policy is sure to yield, once again, to the political "necessities" imposed in a presidential election year. New stimulative policy is forecast to occur in time to cause the national economy to register positive growth in the third quarter. The peak-to-trough decline of this recession should approximate one-half that of the 1973-75 recession. Therefore, a forecast of the local economy may be gleaned from analyzing what happened to it in the last recession.

During the last recession, total payroll employment in the four-county Fort Wayne SMSA declined from a high of 160,800 in July 1974 to a low of 147,300 in May 1975—a decrease of 13,500 or 8.4%. Eighty-five percent of the decline was in the durable goods manufacturing sector. Given the normal one-quarter lag in local economic activity compared with the national economy, local employment should bottom out in the third quarter after decreasing by 5,000-7,000. Essentially all of the decrease is forecast to occur in the durable goods manufacturing sector. Nondurable and nonmanufacturing employment should remain essentially stable during the corresponding period.

In the last recession, Fort Wayne-area department and discount store sales declined 17.3% in real terms on a seasonally adjusted basis, and the timing coincided with the peak and trough in national economic activity. Accordingly, department and discount store sales are forecast to decline through the second quarter, showing a 4-6% year-to-year increase in nominal terms and a 2-4% decrease in real terms. Other retail stores should experience lesser or greater sales declines depending upon their percentages of durable goods sales, as compared with department stores.

During the last recession, the local housing cycle preceded the national economic cycle substantially. Specifically, seasonally adjusted single-family-housing starts declined from a peak average of 158 per month for 1973:1 to a trough of 70 per month in 1974:4, a decline of 56%. In the current cycle, single-family-housing starts have declined from a peak of 200 per month for 1978:2 to 96 per month for 1979:3, a decline of 48%. Thus, local private housing is already depressed and will remain so until early next summer when activity should begin to pick up.

On November 1 approximately 3,000 employees struck International Harvester, the largest employer in the local economy. As of November 15, the strike has not been settled. If the strike continues more than three weeks, its impact on the Fort Wayne economy will be substantial. For example, in October, 1969, 7,000 General Electric employees went on strike for 101 days. Then, as now, the national economy was entering a recession. A comparison of economic data during that strike period with year-earlier data suggests that on a real basis area department and discount store sales declined approximately 12%.

There is no reason for optimism for the Fort Wayne-area economy in 1980. The durable goods portion of the business cycle will not bottom out in time to provide any significant stimulus to the local economy prior to year-end. If the International Harvester strike were to continue for two to three months, then the local economy would recover more in line with the national economy—as IH rebuilt its inventory—rather than lagging as it normally does. However, the higher level of activity in the fourth quarter of 1980 would be more than offset by the current lower-than-forecast activity.